

NETFLIX

ENTERTAINMENT SERVICES

ANDRÉ DESTERRO, PAOLA VIA

COMPANY REPORT

4 JANUARY 2021

29192@novasbe.pt, 41406@novasbe.pt

Netflix: See What's Next

Gambit to the Crown - Buy Debtflix and Chill

- In 2019, international streaming represents the main source of revenue for Netflix, accounting for 52% of total revenue (domestic streaming 46%, DVDs 2%), and is expected to contribute for 79% by the end of 2029.
- Revenue is forecasted to continue increasing following international expansion until 2029 and from 2029 to 2039 because of an extension in the traditional service offerings and reach 173,494.52 million USD in 20 years.
- In 2019, Netflix has spent 15.0 billion USD on streaming content, and it is likely to increase this amount at an average rate of 11% over the next years.
- In 2020, Covid-19 generated a significant hike in the OTT segment adding 28.2 million new paid memberships to Netflix in the first 9 months of the year. However, as subscriptions growth slowed down in the 3rd quarter, the stock plunged showing an elevated degree of sensitivity to missing estimates.
- A DCF valuation yields a weighted average intrinsic price of 604.26 USD for the FY20 based on sensitivity and scenario analyses, highlighting a discount in Netflix's current trading of 14.20%. Thus, considering business and investment risks in the stock, the final recommendation is a (moderate) **BUY**.

Company description

Netflix, Inc. is a provider of subscription streaming entertainment service. Founded in 1997 as a DVD-rental-by-mail firm operating in the US, it entered the streaming business in 2007. Today, the company has paid streaming memberships in over 190 countries and it allows members to watch a variety of commercial-free TV series, documentaries, and features films for a flat monthly fee.

Recommendation: **BUY**

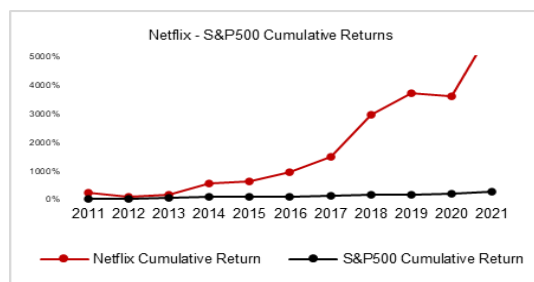
Price Target FY21: **604.26 USD**

Price (as of 4-Jan-21) **540.73 USD**

Reuters: NFLX.OQ, Bloomberg: NFLX US

52-week range (USD)	290.25-533.20
Market Cap (USD\$b)	228.99
Outstanding Shares (m)	441.80

Source: Yahoo Finance



Source: Company Data, Yahoo Finance

(Values in USD millions except ARPU)	2019	2020E	2021F
Revenue	20 156	24 924	34 748
Revenue % Growth	28%	24%	39%
Gross Profit	7 716	8 299	11 570
Gross Margin	38%	33%	33%
ARPU	10.82	11.23	12.05
ROIC	20%	8%	14%
ROA	8%	5%	5%
EPS	4.13	6.19	10.00
(Values in USD millions)	'20 Q1	'20 Q2	'20 Q3
Paid Memberships	183	193	195
Memberships Y/Y % Growth	23%	27%	23%

Source: Company Data, Yahoo Finance, Valuation Forecast

Table of Contents

EXECUTIVE SUMMARY.....	3
GAMBIT TO THE CROWN INSIDE-OUT.....	4
WHAT'S OLD IS NEW.....	4
THE CROWN OF INNOVATION.....	4
BUSINESS MODEL.....	5
COMPETITIVE ADVANTAGE.....	5
STOCK PERFORMANCE.....	6
RATIO ANALYSIS.....	7
GAMBIT TO THE CROWN OUTSIDE-IN.....	7
ENTERTAINMENT AND MEDIA INDUSTRY.....	7
M&A – STRATEGIC AND PRODUCT PARTNERSHIPS.....	9
MARKET SHARE EVOLUTION.....	10
COMPETITORS' RATIO ANALYSIS.....	11
COVID-19 DUAL INDUSTRY IMPACT.....	13
FORECAST.....	14
REVENUE FORECAST.....	14
MEMBERSHIPS FORECAST.....	14
PRICING FORECAST.....	17
EXPENSES FORECAST AND OPERATING MARGIN.....	18
COST OF REVENUE.....	19
MARKETING EXPENSES.....	19
RESEARCH, DEVELOPMENT, GENERAL AND ADMINISTRATIVE EXPENSES.....	20
STREAMING CONTENT.....	20
CONTENT ASSETS.....	21
CONTENT LIABILITIES.....	21
INTRINSIC VALUATION.....	22
DCF VALUATION.....	22
NEGATIVE FCFF.....	22
ROIC, TARGET CAPITAL STRUCTURE AND SUSTAINABLE GROWTH.....	23
WACC.....	24
SENSITIVITY & SCENARIO ANALYSIS.....	25
MARKET BASED VALUATION.....	27
BUSINESS AND INVESTMENT RISKS.....	28
BOOMING BUSINESS OR HOUSE OF CARDS?.....	28
REFERENCES.....	29
APPENDIXES.....	36

Executive Summary

Netflix was founded in 1997 as a DVD-rental-by-mail firm and it went public in 2002. In 2007 the company entered the subscription streaming business on the US market, three years later it started its international expansion in Canada and nowadays it is available in more than 190 countries. Over the last decade, its stock reported 4,181% cumulative return repeatedly outperforming the market. Netflix's revenue has grown significantly since its creation, reaching 20,156.45 million USD in 2019 with 167,09 paid subscriptions and an average ARPU of 10.82 USD. Although the company reports positive earnings, its FCFF has always been negative until 2020, as it bears large fixed upfront costs associated with contents, and it has an extensive amount of debt outstanding.

The Entertainment and Media industry combines multiple segments into one vertical. It is in a transformation phase based on technology innovation and consumer demand changes. Main trends on the industry are digitalization, shift towards customized contents and formats, and consolidation through collaborations, partnerships, and M&A activities. SVoD is the part of the industry closer to Netflix's service offering with US being the leading market approaching a saturation level. Netflix's market share has been decreasing over the last five years because of the growing competition, but it is expected to slightly increase until 2025 following its international expansion, enhanced original content offering, and the consolidation trend on the market. In 2020, Covid-19 pandemic had a dual impact on the industry generating a significant hike in the video streaming service segment.

Netflix revenue is forecasted to continue increasing following its international expansion until 2029 since EMEA, Asia Pacific, and Latin America are far from reaching their saturations and the company plans to increase penetration rates with the help of original content productions. Moreover, from 2029 to 2039, a revenue increase is expected from an expansion of its traditional service offerings. All these things considered, revenue is expected to be 173,494.52 million USD in 2039 and free cash flow to turn positive from 2025 onwards. Following a discounted cash flow valuation, a weighted average intrinsic price of 604.26 USD is estimated for Netflix at the end of 2020 based on sensitivity and scenario analyses, representing a 58.11% gain for an investment of one-year timeframe until 31.12.2021. Thus, considering business and investment risks, a final (moderate) buy recommendation was issued.

Gambit to the Crown Inside-Out

What's Old is New

Netflix was founded in 1997 by Reed Hastings and Marc Randolph as a DVD-rental-by-mail firm in Scotts Valley, California. Despite some initial hurdles mostly related to the dot-com stock market bubble (Neilson 2018), the company managed to stay afloat, and it went public in 2002, as its subscriptions' growth resumed. In 2007 Netflix entered the streaming business on the domestic market as a provider of subscription streaming entertainment service. Three years later, it started its gradual international expansion in Canada. Today, Netflix is available in more than 190 countries (excluding China, Crimea, North Korea, and Syria) offering a various range of customized, region-specific contents according to preferences and cultures for a flat monthly fee.



Figure 1: Netflix streaming service availability
Source: Netflix 2020

The Crown of Innovation

Since its beginning, Netflix has constantly been looking for new ways to grow and outperform its competitors. However, its innovation was not incremental consisting of improvements to the original service offering, but rather disruptive. Disruptive innovation refers to smaller companies that outcompete and eventually destroy bigger competitors. Netflix launched indeed its mail-in subscription service targeting consumers left overlooked or unapproached by big market players and it moved upmarket keeping the advantages and upgrading conforming to mainstream customers' preferences (McAlone 2015).

Netflix's first innovations were in the channel distribution and in the revenue model of its business. Mailing DVDs on a subscription's basis allowed customers to rent an unlimited number of DVDs per month for a flat fee without any due date or late fees. Thereafter, Netflix's channel innovation proceeded with the introduction of streaming service with content available on different devices including PCs, smartphones, tables, and Smart TVs. As competitions in the streaming video-on-demand industry was increasing, Netflix added content creation as a new key activity to the business model and a robust video recommendation algorithm to help viewers to sort out contents to its value propositions. Finally, the company started to release entire seasons of its original shows at once, allowing its customers to watch all the episodes at will without any waiting time (Neilson 2018).

Netflix consolidated a tendency of disrupting sales and delivery channels to skip intermediaries. It has constantly shown an above average ability to read social trends and effectively capitalize on them in an increasingly competitive and cut-



Figure 2: Netflix history
Source: Yahoo Finance 2020

	Innovations
Channels	Online - Delivery Streaming Content on all devices
Revenues Streams	Subscriptions Video recommendation Entire season releases
Values Propositions	Unlimited rentals No due dates, late fees
Key Activities	Original content creation

Figure 3: Netflix innovations
Source: Neilson 2018

throat scenario. When it launched its mail-in subscription service, it did not go after the core customers of competitors like Blockbuster. It addressed a niche, scaled fast, and won the race to the market leaving no room for other players. In a constantly changing world, companies that fail to innovate can easily get left behind, as Blockbuster knows very well.

Business Model

Netflix's overall business model is a hybrid of various business models involving on-demand streaming of entertainment content, and the production of original content. It provides the capability for large-scale high-efficiency operations, while minimizing costs. The company's business model combines platform and pipeline, cutting-out-the-middleman, and unlimited subscriptions business models. Netflix uses a platform business model for its online streaming operations and a pipeline business model for the content production. It bypasses middlemen or intermediaries by directly distributing its originals to customers via its own streaming service and offers unlimited access to entertainment content through a subscription revenue model (Moore 2019).

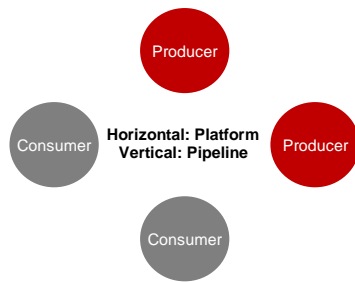


Figure 4: Netflix business model
 Source: Moore 2019

Competitive Advantage

Netflix's competitive strategy is based on cost leadership and differentiation. Netflix gains a competitive advantage through minimized costs and selling prices. This generic strategy enables the company to offer competitive and affordable prices and reach more customers in the domestic and international sectors. It aligns with Netflix's intensive growth strategies, which prioritize market penetration. Over time consumers' purchasing behaviours has proven to be low price sensitive to the company's price increases highlighting a room for potential further boosts.

	2020 US Streaming Plans and Pricing			
	Monthly Basic	Monthly Standard	Monthly Premium	Yearly
Netflix	8.99 USD	13.99 USD	17.99 USD	
Disney Plus	6.99 USD			69.99 USD
Amazon Prime	12.99 USD			199.00 USD
AT&T (HBO Max)	14.99 USD			
Hulu	5.99 USD Ad-supported	11.99 USD Ad-free	Hulu, HBO Max, Showtime, Cinemax, Starz	

Figure 5: 2020 US streaming plans and pricing
 Source: Pateman 2020

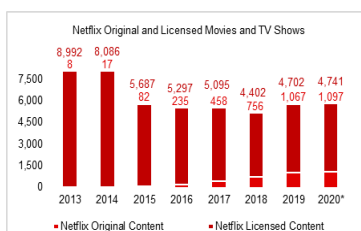


Figure 6: Netflix content differentiation - Original and licensed movies and TV shows 2013 - *Q2 2020
 Source: Clark 2020

Even though Netflix mainly applies cost leadership as a strategy for competitive advantage, differentiation is also a key driver in its operations. The company is trying to develop its service offerings in a way that make them different from the competition. It allows users to choose how they want to interact with its content, instead of making that choice for them. Netflix offers a high degree of flexibility alongside with a large content library of both licensed and produced contents. In 2019 it has released 371 new originals and spent 14,610.69 million USD on content (Netflix Annual Report 2019). Moreover, Netflix's lack of advertisement represents an advantage in customer perception, as venturing towards that route would mean it would need to track more data on its subscribers (Perez 2020). Differentiation allows Netflix to attract and retain new consumers, thereby supporting its domestic market authority and international expansion's plans.

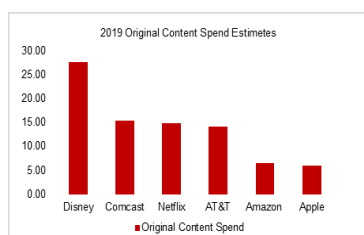


Figure 7: 2019 Original content spend estimates
Source: Variety Intelligence Platform 2020

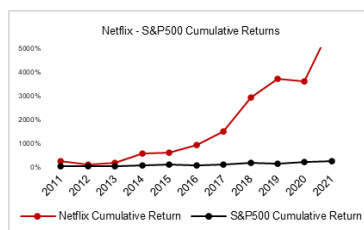


Figure 8: Netflix - S&P cumulative returns 01.01.2011-01.01.2021
Source: Yahoo Finance 2020

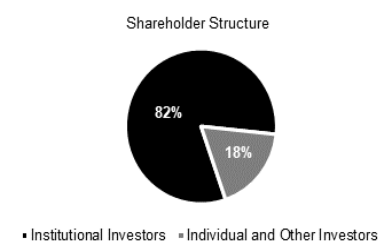


Figure 9: Netflix shareholder structure
Source: Yahoo Finance 2020

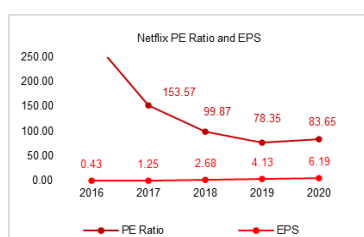


Figure 10: Netflix PE Ratio and EPS 2016-2020
Source: Macrotrends 2020a,b

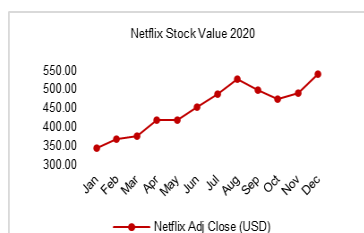


Figure 11: Netflix Stock Value 2020
Source: Yahoo Finance 2020

All in all, Netflix has some competitive advantages that can aid its continued growth and partially offset the effects of its loss of market share. The company has a strong international footprint that allows Netflix to expand on its international penetration when others are still trying to enter those markets. Retention rate is high as well. Over two thirds of Netflix's 2019 subscribers in the US are still subscribed 12 months later (Rieck 2019), which is the highest retention rate on the whole sector.

Stock performance

Netflix's Initial Public Offering was launched in May 2002, when the stock was traded at 15 USD per share. Over the last decade, it reported 4,181% cumulative return outperforming all the current members of the S&P 500. The index as a whole returned indeed 189% over the past 10 years (Financial Express 2020).

At the end of 2019, the company has approximately 590 stockholders of its common stock and a significantly larger number of beneficial owners (Netflix Annual Report, 2019). Institutional investors including individual investors, mutual funds, hedge funds, and institutions hold the majority of Netflix's shares at 82% of total shares outstanding (Yahoo Finance 2020) highlighting a high level of confidence in the company.

As of December 2020, Netflix's price range is between 492.34 and 533.20 per share. Its market cap amounts to 228.99 billion USD with a growth of 56.58% compared to 2019. The stock reported a 52 week range from 290.25 to 575.37 USD per share. The company's Price/Earnings ratio has steadily declined over the last five years while its Earnings Per Share have been regularly increasing in the same time frame and amount to 83.65 and 6.19 respectively (Yahoo Finance 2020). Both metrics represent good signs for the company's present and future profitability.

Netflix's stock has risen significantly in the first half of 2020, as paid subscriptions grew following the company's 2019 significant investments in content and as a consequence of the lockdown measures against the Covid-19 pandemic. By April, the stock went up almost 14% since the beginning of the year, over 96% higher than 2018 same period (Forbes 2020). In July, Netflix warned that the subscriber gains it experienced in the first half of the year would likely decelerate following the ease of lockdown restrictions and the stock dropped of 6.5% the next day (Swartz, Owens 2020). In August, Netflix stock jumped 11.6% after consumer research found that 41% of considered consumers would keep Netflix's subscription after the stay-at-home rules ease, and 52% showed an increased willingness to pay more for its services (Spangler 2020a). In October,

the stock fell 5% as the company reported a dramatic slowdown in new subscribers and missed its 3rd quarter earnings expectations (Swartz, Owens 2020). Finally, after a stock plunge following Pfizer's announcement of positive Covid-19 vaccine results (Healy 2020), Netflix has been rising because of the new lockdown orders and the price increase to its standard plans (Farley 2020).

Ratio Analysis

Netflix's revenue has grown significantly since its creation, and in 2019 it reached a value of 20,156.45 million USD. The company had 167,09 paid subscriptions (Netflix Annual Report 2019) and an average ARPU of 10.82 USD in the same period (Statista 2019a).

Netflix - 2019 Overview		
Revenue	# Subscriptions	Monthly ARPU
20,156.45 M USD	167.09 M	10.82

Figure 12: Netflix 2019 overview
Source: Annual Report 2019, Statista 2019a

To get an overview of the company's performance, a ratio analysis was conducted. Profitability ratios were computed to measure its ability to generate positive net income. In 2020, Netflix has an operating margin of 13% and return on assets is 6% (Stock Analysis on Net 2020). These metrics have been steadily improving over the last years as a result of the company's significant content investments. Moreover, the company ability to meet its debt obligation using its current assets was assessed with the help of liquidity ratios. Netflix's current ratio amount to 0.90, while its cash ratio to 0.73 (Stock Analysis on Net 2020), highlighting insufficient liquid assets to cover its short-term liabilities. Finally, solvency ratios were analysed to estimate the company's long-term financial viability. Both debt to equity ratio and debt to assets, respectively 1.95 and 0.43 (Stock Analysis on Net 2020), have been continuously growing over time following Netflix's tendency to use debt to fund its content investments. However, interest coverage ratio is 4.29 (Stock Analysis on Net, 2020), as the company is able to cover its interest payments over four times with its earnings and little risk is involved.

Netflix - 2019 Ratio Analysis		
Profitability Ratios	Operating Margin	ROA
	13%	6%
Liquidity Ratios	Current Ratio	Cash Ratio
	0.90	0.73
Solvency Ratios	Debt / Equity	Debt / Assets
	1.95	0.43
Interest Coverage		4.29

Figure 13: Netflix 2019 ratio analysis
Source: Stock Analysis on Net 2020

Gambit to the Crown Outside-In

Entertainment and Media Industry

The Entertainment and Media industry is in a transformation phase as both old and new continues to coexist and interactivity, digitization, globalization of services, multiple-platforms and devices has remodelled the entire industry over the last decade. It is based on multiple external factors and technology development such as wireless, mobile, devices, digitization, internet access speeds, cloud storage, consumer analytics and social media. Thus, technology innovation and consumer demands can be considered key drivers for the development of the entire industry (Avasant 2020).

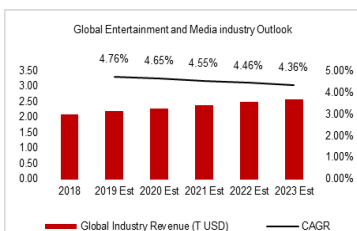


Figure 14: Global Entertainment and Media industry outlook 2018-2023 (in trillion USD)
Source: PwC 2019

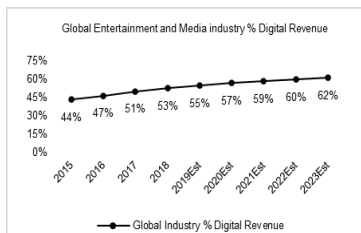


Figure 15: Global Entertainment and Media industry % digital revenue 2015-2023
 Source: PwC 2019

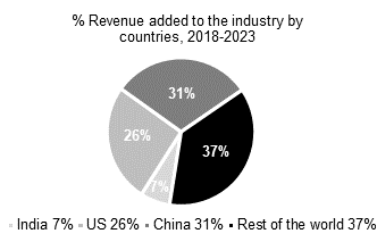


Figure 16: Revenue added to the Entertainment and Media industry by countries 2015-2023
 Source: PwC 2019



Figure 17: Entertainment and Media sector – film & TV segment – OTT platforms
 Source: Tracxn 2020, Vodlix 2020

Following the rise of digitalization and internet, the industry has been undergoing some major changes since 1990s. In 2015, digital revenues accounted for 44% of the entire industry revenues while in 2018 it represented 53% (PwC 2019). This upwards trend is expected to continue accentuating as digitalization keeps increasing and targeting more untapped, developing markets. Developing markets such as India, Brazil, China, South Africa, and Nigeria are indeed estimated to have a CAGR above 11% between 2018 and 2023, topping the global CAGR of 9,5% and countries such as US (8,3%) and Germany (5,6%) (PwC 2019).

Traditionally, content creators were the deciders on what to supply but nowadays demand is completely consumer driven and users are shifting away from the old, predetermined form of consuming information and entertainment. The industry's trend of consumption is for people to construct and consume their own media menus customizing contents and formats (PwC 2019). The new digital consumer is one that values flexibility, availability, and originality the most. In fact, 57% of streaming video subscribers look mostly at content originality when choosing a new service (Deloitte 2019a). Hence, traditional TV stations, physical newspapers and companies with a conservative media services offering will tend to falter in the long term if not flexible enough to satisfy varying customer needs and face the competitors.

The Entertainment and Media industry combines multiple segments into one vertical: film and TV, Print and Publishing, Music, Radio, Gaming, and others. Even if trends and drivers vary across segments and geographies, all the sub-verticals compete, compliment, and combine to fulfil the demand for entertainment and information. Over-The-Top (OTT) Video sub-segment includes online platforms, software, tech-enabled services, and innovative hardware to offer films and TV contents via internet, without requiring users to subscribe to a traditional cable or satellite pay TV service. OTT platforms can be divided into Subscription (SVoD), Transactional (TVoD) and Advertisement (AVoD) based Video on Demand. SVoD is a type of service based on subscription agreements, while for TVoD services an amount is to be paid based on watched content. Finally, AVoD is a model where users are free to log in and stream videos, in return for spending time watching ads (Vodlix 2020).

SVoD is the part of the industry closer to Netflix's service offering. The main market for SVoD services is the US, with a revenue of 22.93 billion USD for 2019 that represents 43% of the global market (Gruenwedel 2020). Penetration rate of SVoD services in the US accounted for 52% of total households in 2015 and it has increased up to 78% in 2020 (Leichtman Research Group 2020), indicating the approach to a saturation level.

M&A - Strategic and Product Partnerships

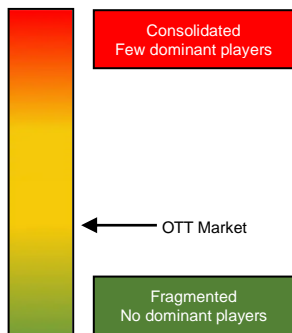


Figure 18: OTT market 2020-2025 competitive landscape
 Source: Mordor Intelligence 2020

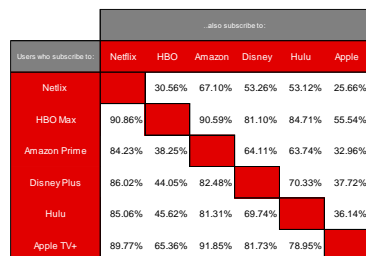


Figure 19: Share of SVoD subscribers who also subscribe to other services US in October 2020, by service
 Source: Statista 2020a

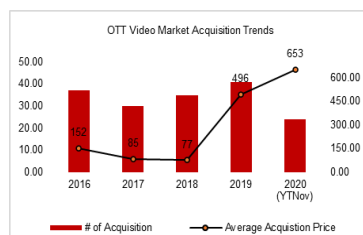


Figure 20: OTT Video market acquisition trends 2016-2020 (Prices in millions USD)
 Source: Tracxn 2020

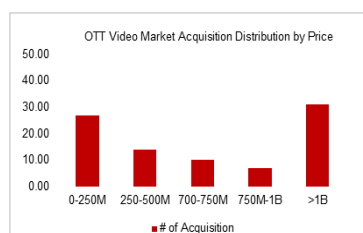


Figure 21: OTT Video market acquisition distribution by Price 2016-2020 (Prices in millions, billions USD)
 Source: Tracxn 2020

With the entrance on the market of big new players, the Entertainment and Media industry offers consumers an enhanced growth in contents' choice that has slowly escalated their frustration. However, as consumer adoption of online alternatives grows, the degree of disruption felt by traditional distribution models is accelerating. The global Entertainment and Media industry is therefore expected to consolidate further with stockholders to make use of strategic M&A and partnerships to strengthen their content quality and distribution capability. Moreover, numerous market participants will shift along the value chain by expanding their businesses instead of just focusing on their core competencies (Deloitte 2019b).

The rationale behind OTT surge is to give consumers the freedom to pick and watch video everywhere, every time, on any device possible. Hence, stacking rates - consumers taking multiple SVoD services - among subscribers have been increasing but, at the same time, users are looking for fewer platforms that deliver a full array of content in the same place. They value flexibility and consequently prefer to have premium content from different providers in a single account (Pennington 2019). Over the last years, partnerships and acquisitions have been reshaping the video media landscape following agreements to capture the greatest market share, create business alliances and enhance product offerings. Nowadays, OTT providers' challenge is to identify the offerings and partnerships that will maximize revenue and attract more customers.

On the OTT Video market, 311 total acquisitions for an average price of 259 million USD were taking place. Considering the timeframe 2016-2020, 2019 was the year where most of deals happened counting 41 acquisitions for an average of 496 Million USD (Tracxn Feed Report 2020). A notable example is the Verizon's purchase of Yahoo in 2017 to extend its reach to consumers and boost its presence in the mobile and online video space (Kharpal 2017). Moreover, Disney acquired Twenty-First Century Fox in 2019 to expand its capabilities, content output, growth opportunities, and its presence in developing markets (Reuters Staff 2019); and the merge between T-Mobile and Sprint Corporation has been completed in 2020 to launch nationwide 5G network in US, deliver lower prices, best value, and gives the company a competitive edge in the wireless, video, and broadband segments (McLymore, Bartz 2020).

Partnerships and collaborations are a key strategy followed by the OTT market players to become more competitive on the global landscape and gain market share. Telecoms and pay-TV operators struck deals with OTT service partners focused on service integrations into tariff plans or technical integrations into the

user interface, and commercial agreements with revenue sharing, carrier billing arrangements, and white-labelled or cobranded offerings. As a result of agreements over the last years, Amazon's Prime Video is featuring content from HBO, Cinemax, Showtime, and Starz (Leighton 2019), Hulu and Spotify offer college students a joint subscription at a promotional price (Blumenthal 2019), and Sony and Microsoft team up to develop future cloud solutions for content streaming and game services (Good 2019).

In the busy M&A market of the Entertainment and Media industry, Netflix stands out for the bashfulness of its acquisitions. In more than twenty years of history, it has only finalized two deals, buying Millarworld Limited, a UK-based comic book publishing powerhouse, in 2017 and StoryBots, Inc., a US-based internet television subscription service for watching educational entertainment shows, in 2019. Through its first acquisition, Netflix gained Millardworld's skilled content creators, intellectual property, and ownership of stories featuring popular characters (Netflix 2017) while thanks to the deal with StoryBots, it was able to provide educational content to its growing member base of kids and families (Netflix 2019). Despite 1 billion USD debt raised for operations and potential M&A transactions in the first half of 2020 (AnalyzeMarkets 2020), and the recent deals Disney-Fox, Comcast-Sky, AT&T-Time Warner, Viacom, and CBS (Sherman 2020), Netflix's CEO Reed Hasting affirms to be only focused on original contents' growth and service improvements but always with an open mind on potential acquisitions (Hasting 2020).

Striking partnership deals with pay-TV and telco operators has helped Netflix raise subscriber numbers and boost its penetration rates on international markets over time. Thanks to an increasing number of partnership deals with pay-TV companies in 2019, Netflix gained access to more than 300 million pay-TV households worldwide, almost double its global subscriber base of 158 million. Netflix is therefore expected to keep growing its partnerships agreements to attract many of the large pay-TV operators in Central and South America, Asia Pacific, and in Central and Eastern Europe, as these markets together are home to nearly 400 million pay-TV subscribers but only one tenth of them are already Netflix's subscribers (Roxborough 2019).

Market Shares Evolution

Netflix's competition is much stronger than it used to be some years ago when the company was the biggest player on the market worldwide. In 2015 Netflix had a total market share of 43%, with its closest competitors being Amazon (18%) and Hulu (8%) and the rest of the market distributed between Chinese companies (10%) and other minor players (21%). However, in 2020, Netflix's

Entertainment and Media Industry Recent M&A Deals		
	Deals	Value
June 2018	AT&T - Time Warner	85 B
March 2019	Disney - Fox	71 B
October 2018	Comcast - Sky	39 B
August 2019	CBS - Viacom	12 B
March 2018	Discovery - Scripps Networks	12 B
May 2019	Sinclair - FoxSports Networks	10 B

Figure 22: Entertainment and Media industry recent M&A deals
Source: Bridge 2019

Netflix M&A Deals		
	Deals	Value
May 2019	Netflix - StoryBots	n.a.
August 2017	Netflix - Millarworld	n.a.

Figure 23: Netflix M&A deals
Source: Netflix 2017, 2019

Netflix Key Partners	
Partners	
Smart TV companies	LG, Sony
Alliances with gaming industry	Wii, X-Box, Playstation
TV network companies	Dish, Tivo
Tech companies	Apple, Android, Microsoft, Google, Amazon

Figure 24: Netflix key partners
Source: Business Strategy Hub 2020

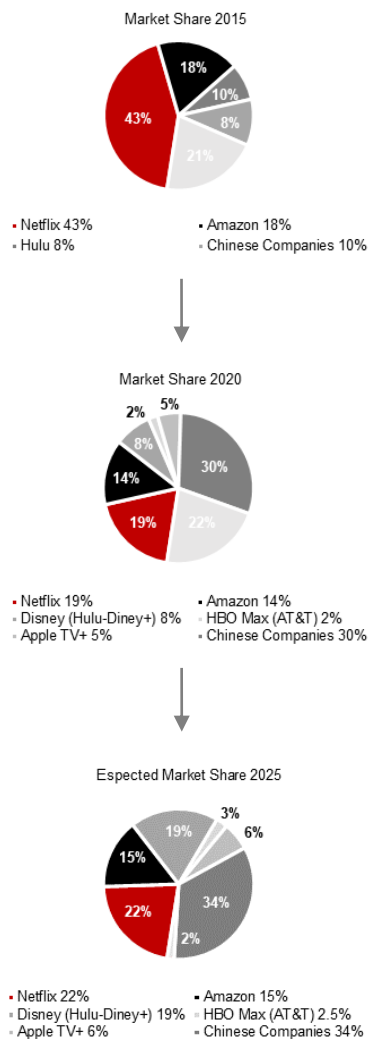


Figure 25: Market share evolution
 Source: Bisson 2020

market share dropped to 19% as Disney (5%) and Apple (5%) entered the SVoD market. Chinese companies like iQIYI (backed by Baidu), Tencent Video (backed by Tencent), and Youku Premium (backed by Alibaba) experienced a surge in their market share moving from a combined market share of 18% in 2015 to 30% in 2020 (Bisson 2020).

Netflix's market share is forecasted to slightly increase further over the next years as a result of the expected growth on the international sector and reach 23% by 2025. Moreover, it is expected that Disney, Apple, and HBO Max will reach a market share of 19%, 6% and 2.50% respectively by 2025. Disney's growth is likely to be higher due to the company's larger experience in creating and exporting media contents, its long-term brand stewardship, and the acquisition of Hulu's majority stake in 2019 (Disis 2019). Moreover, Chinese players are likely to increase market share from 30% in 2020 to 34% in 2025 as user penetration rate in China is predicted to grow from 18% in 2020 to 29% in 2025 (Statista 2019b) and subscriptions growth to raise following the aggressive content investments of their cash rich tech-giant parent groups. Unlike competing companies' growth, market share is a zero-sum game. Hence, the market share's growths of Netflix, Disney, Apple, HBO Max, and the Chinese peers will come at the expense of their most direct competitor Amazon. By 2025, Amazon is therefore expected to have a market share of 15%, only 1% higher than in 2020, and be inferior to Netflix's amount of original contents and Disney's brand recognition. Finally, following consolidation trends on the Entertainment and Media industry, market share of other minor players is likely to drop from 22% in 2020 to 1.50% in 2025.

Netflix's loss of market share over the last five years is the result of a joint contribute of forces from inside and outside the SVoD sector. In fact, the company is facing competition from traditional TV as well. Even if cord cutting - households stopping subscribing to traditional TV packages for streaming service subscriptions - is on the rise, with more than one-third of the US households being expected to cut pay TV by 2024 (eMarketer Editors 2020), there is still a sizeable portion of the population that subscribes to traditional TV. However, although lower income households still prefer to pay TV rather than subscribe to SVoD services, 60% of US households pays both a traditional TV and a SVoD service (Gruenwedel 2020), reducing the threat to Netflix's market share.

Competitors' Ratio Analysis

Netflix does not have a very like for like, comparable company as all the peers comparable to its size have a broader horizon and are not focused only on streaming service. However, key metrics for Disney, AT&T (HBO's parent

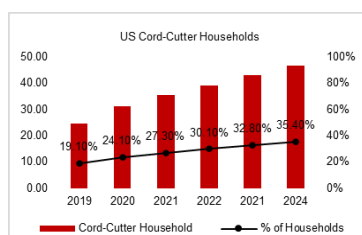


Figure 26: US cord-cutter households 2019-2024
 Source: eMarketer Editors 2020

company), Charter Communications and Comcast Corporation were compared to Netflix based on 2020 values to benchmark the company in the industry.

In the 3rd Quarter of 2020, Disney's twelve months ending revenue amounted to 65,388 million USD (Macrotrends 2020c), with an ARPU of 4.52 USD per month (Levine-Weinberg 2020), 74% higher than its ARPU in 2019, and 86.80 million subscribers (Spangler 2020b). AT&T's revenue was 172,890 million USD (Macrotrends 2020d) and its number of video subscribers 18.41 million (2nd Quarter 2020) (Munson 2020). Charter Communications' revenue was equal to 47,234 million USD (Macrotrends 2020e) coming from 15.65 million subscriptions (2nd Quarter 2020) (Munson 2020). Lastly, Comcast Corporation had a revenue of 104,254 million USD (Macrotrends 2020f), following 19.47 million subscribers (2nd Quarter 2020) (Munson 2020).

Competitors - 2019 Overview			
	Revenue Q3 2020	# Subscriptions Q2 2020	Monthly ARPU 2019
Walt Disney	65,388 MUSD	86.80 M	2.60
AT&T (HBO Max)	172,890 MUSD	18.41 M	111.80
Charter Communications	47,234 MUSD	15.65 M	113.79
Comcast Corporation	104,254 MUSD	19.47 M	84.60 (Q4 2018)

Figure 27: Competitors overview
 Source: Macrotrends 2020c,d,e,f, Levine-Weinberg 2020, Spangler 2020b, Munson 2020, Statista 2019c,d

Netflix - 2019 Benchmark Ratio Analysis		
Profitability Ratios	Operating Margin	ROA
Netflix	13%	6%
Walt Disney	15%	6%
AT&T (HBO Max)	15%	3%
Charter Communications	14%	1%
Comcast Corporation	19%	5%
Average	16%	4%
Liquidity Ratios	Current Ratio	Cash Ratio
Netflix	0.90	0.73
Walt Disney	0.90	0.17
AT&T (HBO Max)	0.79	0.19
Charter Communications	0.52	0.28
Average	0.76	0.21
Solvency Ratios	Debt / Equity	Debt / Assets
Netflix	1.95	0.43
Walt Disney	0.53	0.24
AT&T (HBO Max)	0.89	0.30
Charter Communications	2.51	0.53
Comcast Corporation	1.24	0.39
Average	1.29	0.37
Interest Coverage		
Netflix	4.29	
Walt Disney	12.19	
AT&T (HBO Max)	3.19	
Charter Communications	1.64	
Comcast Corporation	4.72	
Average	5.44	

Figure 28: Netflix 2019 Benchmark ratio analysis
 Source: Stock Analysis on Net 2020

As for the ratios, Disney has an operating profit margin of 15% and 6% return on assets. Its current ratio amount to 0.90, while cash ratio to 0.17. Debt to equity ratio is equal to 0.53 and debt to assets to 0.24. The company's interest coverage ratio is 12.19 (Stock Analysis on Net 2020). AT&T's operating profit margin is 15% and return on assets 3%. Its current ratio is equal to 0.79, while cash ratio to 0.19. Debt to equity ratio amounted to 0.89 and debt to assets to 0.30. The company's interest coverage ratio is 3.19 (Stock Analysis on Net 2020). Charter Communications' operating profit margin is 14%, return on assets 1%, current ratio 0.52, and cash ratio is 0.28. Its debt to equity ratio is equal to 2.51 and debt to assets to 0.53. The company's interest coverage ratio is 1.64 (Stock Analysis on Net 2020). Comcast Corporation's operating profit margin amount to 19% and return on assets to 5%. Its current ratio is 0.84, while cash ratio 0.18. Debt to equity ratio is equal to 1.24 while debt to assets to 0.39. The company's interest coverage ratio is 4.72 (Stock Analysis on Net 2020).

To sum up, among the considered peers for the year 2019 Netflix has the lowest operating margin and the highest return on assets while being the market leader for the number of paid subscriptions. Both the liquidity ratios considered as well as debt to equity and debt to assets ratios are higher than the industry average for Netflix highlighting a safety margin to meet its current liabilities and an extensive use of debt financing. However, Netflix's interest coverage ratio is low when compared to its benchmark's average and represents an inferior amount of profits available to meet its debt interest expenses.

Considering all the analysed peers, Charter Communications is the company with the worst financial situation, as it has lowest profitability, current and interest coverage ratios alongside with the highest debt ratios. On the other hand, Disney is the best performing in liquidity and solvency ratios, it has above average

profitability ratios and it indicates through its low cash ratio a tendency to use cash funds for expansion purposes. Thus, Disney represents the biggest threat for Netflix, even though it launched its SVoD streaming services only in 2019.

Covid-19 Dual Industry Impact

Global Entertainment and Media industry can be broken down based on online video streaming, amusement parks, theatrical productions, sports, live events, and trade shows. The outbreak of Covid-19 had a dual repercussion on these different segments and has impacted the industry worldwide. Companies experienced losses due to all the upcoming events that have been cancelled or delayed. On the other hand, the online video streaming segment recorded a significant hike this year despite the amount of people who cancelled subscriptions following the lower household income from the pandemic. Video streaming companies were able to come up with new solutions for people forced to reside more at homes such as Netflix's Google Chrome browser extension which allows users to access the videos in groups and watch them together. New customers' acquisitions have accelerated due to the added "free" time people had (Deloitte 2020).

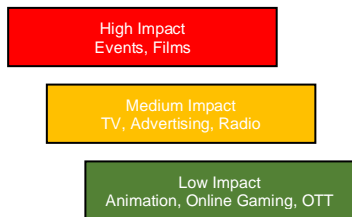


Figure 29: Covid-19 impact on Entertainment and Media industry
Source: KPMG 2020

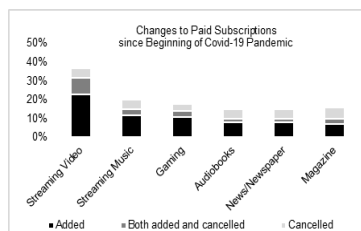


Figure 30: Changes made to paid subscriptions since the Covid-19 pandemic began
Source: Deloitte 2020



Figure 31: Netflix global paid memberships 2020
Source: Netflix Q3 Shareholder Letter 2020

Covid-19 pandemic led to a shift in media and entertainment consumption, as people spend more time at home and a higher amount of entertainment hours need to be filled. Although consumption is up, revenue is down overall in an industry that relies heavily on advertising spends in a time when all the companies are reducing their marketing expenses and entire segments like movie theatres, film producers, live music, and sports are also at a stop. Moreover, users' demand is threatened by content supply shortage following the raised pressure on content libraries and the restrictions that have made it difficult, and in some cases even impossible, to produce new contents (Capgemini 2020). While the Entertainment and Media industry is among the hardest hit by the Covid-19 crisis, it is also the one people rely on to counter the isolation caused by social distancing, stay informed and entertained. Hence, it is expected to recover quickly from the 2020 pandemic, as past crises have already proven (PwC 2020).

In the first nine months of the year, Netflix added 28.2 million paid memberships, exceeding the 27.8 million of the entire 2019 year (Netflix Q3 Shareholder Letter 2020). However, even though the company's reported a high revenue growth over the year, paid memberships' hike slowed down drastically in the 3rd quarter as people compelled to buy subscriptions following the lockdown restrictions already did so during the first wave.

Forecast

Segments as a % of Total Revenues

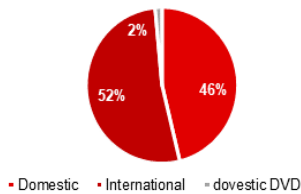


Figure 32: Segments as a % of total revenues 2019
 Source: Annual Report 2019

To evaluate Netflix, a forecast for the timeframe 2020-2029 was estimated without taking into consideration any anomalies from the Covid-19 pandemic. The main captures of income statement and balance sheet were forecasted using revenue as primary value driver. In addition, content assets and liabilities were analyzed to assess the development of total streaming content and its impact on the company's revenue.

Revenue Forecast

Netflix revenues can be segmented in domestic streaming, international streaming, and domestic DVDs. International streaming represents the main source of revenue at the end of 2019 accounting for 52% of total revenue compared to 46% of domestic streaming and 2% domestic DVDs. The company derives revenues from monthly membership fees for the offered services associated to streaming content and DVDs rentals. Thus, the number of paid memberships and the related price changes play a crucial role in the estimation of the revenue for the next ten years. Revenue was forecasted based on paid memberships breaking down the value drivers by segment and by geography. Netflix total revenue in 2019 amounts to 20,156.45 million USD and is expected to hit 85,508.86 million USD in 2029 growing at an average growth of 25%. In 2029 the international streaming sector will contribute for 79% of the company's total revenue while 21% will come from the domestic sector. In the international streaming sector Asia Pacific will be the highest contributor to the revenue increase, followed by the EMEA region.

Segments as a % of Total Revenues

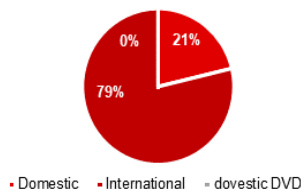


Figure 33: Segments as a % of total revenues 2029 forecast

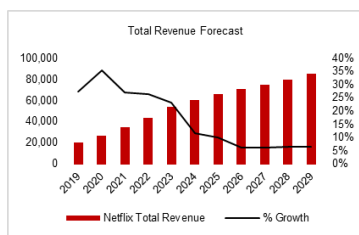


Figure 34: Total revenue forecast

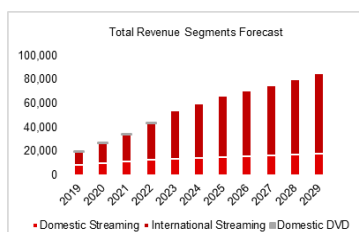


Figure 35: Total revenue segments forecast



Figure 36: Domestic sector paid memberships forecast and penetration rate

Memberships Forecast

The streaming sector was growing at an average rate of 33% over the last five years and it represents 97% of Netflix's total revenue. On the other hand, revenue from rental domestic DVD has decreased approximately 19% per year from 2017 to the end of 2019. Despite the still high profit margin of the DVD business, the company has never shown an interest in preventing its extinction (Littleton and Janko Roettgers 2018). In the light of this and of the lower demand for physical copies of the streaming contents (Statista 2019e), memberships for domestic DVD rentals are expected to decrease at a progressive rate until 2022, when the company is likely to remove it from its service offerings.

The domestic streaming sector counts 61.04 million paid memberships at the end of 2019, only 4% more than in the previous year. From 2017 to 2018 the growth in the number of subscriptions was 11%, similar to the preceding period's growth of

	US Launch: 2007	
	2019	2029
#M Memberships	61.04	83.07
Penetration Rate	53.65%	59.89%
USD ARPU	12.57	18.24

Figure 37: Domestic sector overview

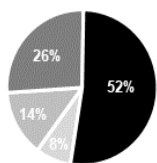
10%, highlighting the reaching of a mature stage in the US market. From 2007 Netflix has been boosting its streaming service from niche to national level obtaining a 54% penetration rate at the end of 2019 considering 113.79 million household with broadband internet access in the country (Statista 2019f). Being that America is likely to be 100% wired for broadband by 2030 (Cooper 2020), Netflix will still increase its yearly net memberships additions by that time. Thus, taking into account its steady stage, the company is expected to grow its number of subscriptions for the next 4 years at an average rate of 5% before stabilizing and aligning with the expected 1.90% GDP growth rate of the US economy (International Monetary Fund 2020a). Therefore, in 2029 83.07 million of paid memberships and a penetration rate of 60% are forecasted.

For forecast purposes, the international streaming sector was broken down into four macro-regions: Canada, Latin America, EMEA, and Asia Pacific. Particular attention was paid to the degree of similarity that each region has with the US market in terms of consumer tastes and to market specific competition levels. Estimations were made taking the US domestic streaming sector as benchmark and considering different development and growth stage coming from SVoD industry penetration rates and Netflix platform specific launch timeline.

Netflix international expansion started in Canada in 2010. Because of the similarity of the Canadian and US markets in terms of consumer tastes, preferences, behaviors and income levels, a similar evolution in the number of memberships was assessed. Netflix subscriptions at the end of 2019 in Canada amount to 6.62 million reflecting a growth rate of 6% over the entire year. Like in the US, a growth slowing down from 12% in 2018 was recorded marking the company's approach to a mature stage in the Canadian market. Hence paid memberships are likely to growth at a shrinking rate from 10% to 3% until 2024, reaching afterwards a sustainable 1.80% level conforming to the expectations for the Canadian economy (International Monetary Fund 2020a). Penetration rate based on household with internet access is expected to intensify from 44% in 2019 to 57% in 2029.

In 2011, one year after its entrance into the Canadian market, Netflix launched its streaming service in Latin America. Using the total amount of SVoD subscriptions in the region as a benchmark, Netflix has a penetration rate of 75% in 2019. As Latin America is predicted to have 100.35 million SVOD subscriptions by 2025 against the current 42.15 million and a wave of US-based platform launches (Disney+, Hulu, HBO Max and ViacomCBS) are planned for 2020 and 2021 (Research and Markets 2020), Netflix paid memberships are expected to grow but its dominance will decline. The 31.42 million 2019 subscriptions are forecasted to grow at a lower rate than the current 20% until reaching 47.58

Macro-regions as a % of International Streaming Sector Revenue



• Canada 8% • APAC 14% • LATAM 26% • EMEA 52%

Figure 38: Macro-regions as a % of international streaming sector revenues 2019

Source: Annual Report 2019

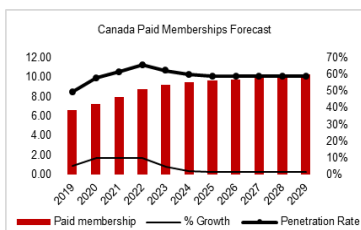


Figure 39: International sector - Canada paid memberships forecast and penetration rate

	Canada Launch: 2010	
	2019	2029
#M Memberships	6.62	10.37
Penetration Rate	44.48%	57.15%
USD ARPU	12.57	18.88

Figure 40: International sector - Canada overview

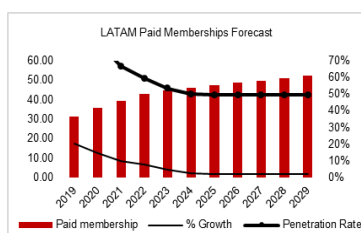


Figure 41: International sector - LATAM paid memberships forecast and penetration rate

LATAM Launch: 2011		
	2019	2029
#M Memberships	31.42	52.52
Penetration Rate	74.54%	47.22%
USD ARPU	8.21	13.81

Figure 42: International sector - LATAM overview

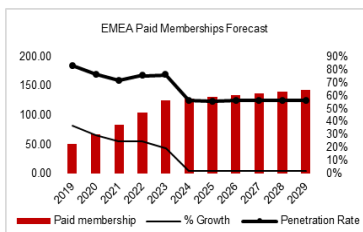


Figure 43: International sector - EMEA paid memberships forecast and penetration rate

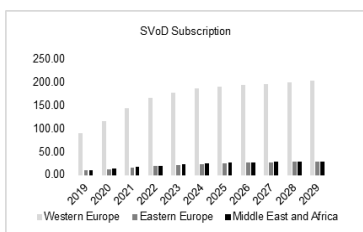


Figure 44: EMEA – Western Europe, Eastern Europe, and Middle East and Africa SVoD subscriptions

EMEA Launch: 2012		
	2019	2029
#M Memberships	51.78	144.09
Penetration Rate	46.56%	54.63%
USD ARPU	8.21	13.81

Figure 45: International sector - EMEA Overview

million in 2025 and subsequently follow the 2.50% GDP growth rate. Because of the intensified competition and despite the rapidly expanding economies, the growth of broadband connectivity and a wide-open market for low-priced entertainment, penetration rate is forecasted to drop to 47% in 2029.

Netflix initiated its international expansion in the EMEA area in 2012. In this region, the company has not reached a steady stage yet, but its paid subscriber growth has slowed down to 37% in 2019 from 45% in 2018. At the end of 2019, the company has 51.78 million memberships corresponding to a penetration rate of 47% on the total SVoD subscriptions. At the end of 2019, this sector counts 90 million of paid subscriptions that are expected to increase to 191 million by the end of 2025 (Digital TV News 2020) preceding a stabilized growth of 1.70%. Western Europe countries are comparable to US and Canada in respect to media consumption trends, wide spread of internet and broadband connections and living standards' quality. Thus, they are expected to growth conforming to a similar pattern to the domestic streaming sector. It is expected that by the end of 2021 over four in 10 internet users in Western Europe will watch Netflix at least once a month (Brentnall 2020). However, analogous to Latin America, growth in viewership will slow down in 2020 and 2021 following a rise of competition. Amazon Prime Video and Disney+ are indeed gaining market share and local TV broadcasters have been offering their own streaming platforms and joining forces to form new local streaming services, as demand for locally produced and native-language content has increased in Western Europe. Netflix's expansion in the Eastern European market started in 2016 as local TV operators were looking for value-added initiatives for their traditional service offerings. In 2019 the number of paid SVoD subscriptions in the market reaches 10.26 million and it is expected to be more than double in 2025 (Digital TV News 2020) before continuing to grow at the GDP expected rate of 2.60%. So far international over-the-top video services have not significantly expanded their footprints across Eastern Europe markets, as they were not successful in establishing partnerships with local operators. The Netflix deal with Platforma Canal+ is the first significant partnership between the worldwide stand-alone OTT player and a large pay TV operator in Eastern Europe (Gaber 2020). Lastly, in Middle East and Africa, Netflix represents a driving force for subscription streaming video and is predicted to generate 38% of the total 2.97 billion USD estimations for 2025 (Digital TV News 2020). SVoD subscriptions in this market are expected to be 29.95 million by 2029 growing at a sustainable 2.40% growth from 2026. All these things considered, in the EMEA region Netflix is forecasted to have a penetration rate of 55% on the total paid SVoD subscriptions and its paid number of subscriptions will peak at 144.09 in 2029.

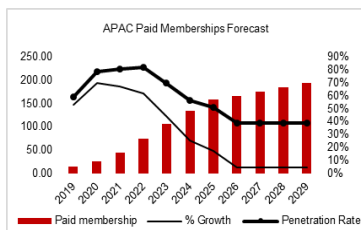


Figure 46: International sector - APAC paid memberships forecast and penetration rate (2. India expansion 50M)

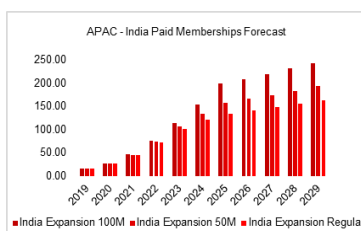


Figure 47: International sector - APAC – India paid memberships forecast 1., 2., 3., India expansion 100M, 50M, regular)

	APAC Launch: 2016	
	2019	2029
#M Memberships		
1. India Expansion 100M	16.23	244.03
2. India Expansion 50M	16.23	194.06
3. India Expansion Regular	16.23	164.27
Penetration Rate		
1. India Expansion 100M	6.08%	42.82%
2. India Expansion 50M	6.08%	34.05%
3. India Expansion Regular	6.08%	28.82%
USD ARPU		
	9.24	12.53

Figure 48: International sector - EMEA overview

	US Streaming Plans and Pricing		
	Basic	Standard	Premium
Monthly cost USD	8.99 USD	13.99 USD	17.99 USD
# Screens at the same time	1	2	4
# Phones or tablets to download on	1	2	4
Unlimited movies and TV Shows	✓	✓	✓
Watch on laptop, TV, phone and tablet	✓	✓	✓
HD available		✓	✓
Ultra HD available			✓

Figure 49: Domestic Streaming sector plans and pricing
Source: Netflix 2020

Netflix launched its streaming services in the Asia Pacific region in 2016 hitting a penetration rate of 6% over the 267 million total market SVoD subscriptions in 2019. Asia Pacific is Netflix's least mature region and the smallest by revenue in its international streaming sector. However, paid memberships grow of 67% from 10.61 million to 16.23 million between 2018 and 2019 accentuating the presence of a lot of room for growth. The low penetration rate in the market derives from the initial failure to enter the Chinese market due to government restrictions. Excluding China, the biggest country with a 1.37 billion population in Asia, Netflix's strategy needs to be focused on other opportunities such as India, Korea, Japan, Indonesia to boost its penetration rate. In 2018, Netflix CEO discussed the goal of reaching 100 million subscribers in India in the long run. A combination of factors including original content for India, partnership with Airtel for better access to market, fixing payment issues, and a new low cost-based variant for a price-sensitive Indian market helped the company to obtain a 67% increase from 2018 to 2019 in the percentage of existing paid memberships in India (Chanda 2019). Thus, for the forecast of paid memberships in the Asia Pacific region a sensitivity analysis with three different potential growth outcomes (Indian expansion will reach 100 million, 50 million or 20.24 following a regular development of Netflix subscribers in 2029) in India was created. If Hastings' prognosis of reaching 100 million subscribers is correct, paid memberships should growth at an average rate of 86% until reaching a steady stage of 5.10% starting from 2026. A lower average growth rate of 66% will instead lead to 50 million of memberships while a 44% growth to 20 million. Considering that APAC internet penetration is likely to reach 61% by 2024 (GlobalData Technology 2020) and SVoD subscription in India 45 million by 2025 (Digital TV Research 2020), the second scenario (average growth 44% and 50 million subscription in 2029) is assumed to be the most appropriate.

■ Pricing Forecast

Netflix offers three streaming video plans (basic, standard, and premium) with different prices starting with the lowest at 8.99 USD per month and topping out at 17.99 per month. More expensive plans are associated with higher quality video and family-friendly features that allow to watch video on more than one screen at a time (Netflix 2020). Domestic DVDs can be rented in US for a minimum price of 7.99 USD up to a maximum of 14.99 USD (Gebel 2020). In the forecast an average revenue per users was considered as a value driver for each macro-region of the streaming sector and rental fees for DVD are not expected to be subjected to any changes until the company will remove it from its service offerings. Despite the increasing competition offering varying price points that make streaming services available to any budget, Netflix still have room to

US DVD Plans and Pricing		
	Standard	Premium
Monthly cost USD	7.99 USD	11.99 USD
Monthly cost with Blu-rays USD	9.99 USD	14.99 USD
# Discs out-at-a-time	1	2
# Discs per month	Unlimited	Unlimited
No late fees	✓	✓
Free shipping and returns	✓	✓
First month free	✓	✓
Cancel anytime	✓	✓

Figure 50: Domestic DVD sector plans and pricing
 Source: Gebel 2020

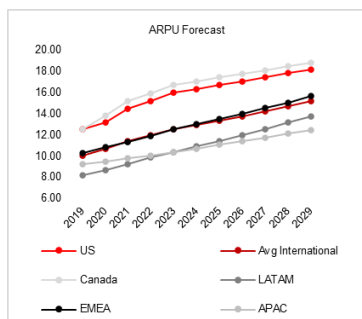


Figure 51: Domestic sector and international sector ARPU forecast

increase its pricing especially in certain markets such as the U.S. and Canada. In the past, Netflix bumped its prices higher roughly every two years. At the start of 2019, it raised US prices by 2 USD for both standard and premium subscriptions and 1 USD for the basic plan (Joan Solsman, Crist 2020).

ARPU for the domestic streaming sector raised at an average growth rate of 11% from 9.21 USD in 2016 to 12.57 USD in 2019. As the US market has already reached a mature stage, it is estimated that price will increase at an average of 6% until 2023 and afterwards at the yearly estimate inflation rate for the US market of 2.20% (International Monetary Fund 2020b). Likewise, in Canada ARPU is expected to grow at an average rate of 9% for four years and 2.00% from 2024 onwards according to inflation changes' prognosis. In Latin American countries due to exchange rates, the average monthly subscription fees are among the cheapest and least profitable. In this region Netflix reduced its entry prices to scale up. Therefore, ARPU is expected to rise at the inflation rate (5.34% on average) and no major price increase policies are forecasted. In the EMEA region, prices are likely to grow in the Western European countries similarly to the North American market, while in Eastern Europe, Middle East, and Africa they will increase at a lower rate because of the developing stage the company is still in. Hence, until 2023 ARPU will grow at 5% and subsequently at an average inflation rate for the entire region of 3.77%. Finally, as the company is less mature in Asia Pacific and it is pursuing a low cost-based strategy for price-sensitive markets, ARPU is forecasted to grow following the inflation rate of average consumer prices (3.09% on average) from 2020 onwards.

Expenses Forecast and Operating Margin

Cost of revenue and operating expenses are analysed as a percentage of the total company revenue and forecasted for the next ten years considering historical trends and strategic planning for the future. Operating margin as a percentage of revenue has been increasing from 4% in 2015 to 13% in 2019 as a sign of both revenue and margin increase. The margin has been expanding primarily because Netflix pays for its content investments on a fixed-cost basis regardless of the amount of viewership and subscriptions. Hence, each additional paid membership comes with a little extra cost. However, Netflix is still making big expenditure in cost of revenue for more content licenses and production, and in marketing. The company is expected to continue along this path in the next years due to increased competition. For this reason, despite the high margin in 2019, operating result is forecasted to be 6,437.31 million USD in 2029 as a result of a 7% average operating margin over the next ten years.

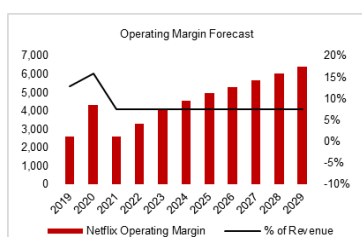


Figure 52: Operating margin forecast

Cost of Revenue

Segments as a % of Total Cost of Revenue

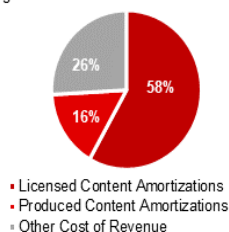


Figure 53: Segments as a % of total cost of revenue 2019

Source: Annual Report 2019

The cost of revenue was broken down into licensed content amortizations, produced content amortizations and other cost of revenue to estimate the evolution of each capture over time. Costs for streaming contents depend on the amount of content licensed and produced. Payment terms for certain content licenses and the production of content require more upfront cash payments. Thus, these expenses are amortized in the cost of revenue over a maximum of ten years after the content is made available for the users and they make up the majority of cost of revenue. The amortization is on an accelerated basis, as typically more upfront viewing is expected, and film amortization is more accelerated than TV series amortization. On average, over 90% of a licensed or produced streaming content asset is expected to be amortized within four years after its month of first availability (Netflix Annual Report 2019).

Content amortization identifies the amount of Netflix's content assets that is written off each period to extend out the cost of content. Analysing content spend by years based on both content amortization and cash spent, it can be observed that cash spent has been increasing faster than the amortized amounts over the last years highlighting the company's shift to producing originals. From 2015 to 2019 content amortization grew at an average of 28% compared to 36% of the cash spend (Next Level Finance 2020). Indeed, produced content expenses are much more upfront compared to a licensing arrangement over time.

In 2019 licensed content amortisations account for 36% of Netflix's total revenue, produced content amortisations for 10% and other cost of revenue represents 16% instead. As the company is expected to growth further over the forecast period focusing on originals' production and on gaining new licensed contents, an increase in the cost of revenue was forecasted. Licensed content amortizations are likely to grow at an average rate of 15% over the forecasted period, lightly increasing compared to the 13% over the last three years. Produced content amortizations will increase yearly at an average 16%, following the growing trend of the last years as the company is planning to invest more in Netflix originals (Vlessing 2020). Other cost of revenue will continue to grow at an average of 16% similarly to the previous period. To sum up, Netflix cost of revenue is likely to grow at an average rate of 17% for the entire forecasted period and hit 57,037.15 million USD by the end of 2029.

■ Marketing Expenses

Marketing expenses consist primarily of advertising expenses and certain payments made to marketing partners, including consumer electronics, manufacturers, MVPDs, mobile operators and ISPs. Advertising expenses comprise promotional activities such as digital and television advertising.

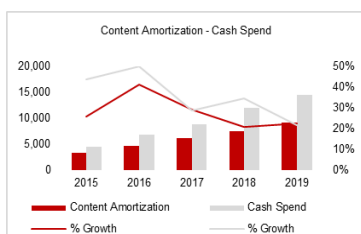


Figure 54: Content amortization and cash spend 2015-2019

Source: Next Level Finance 2020

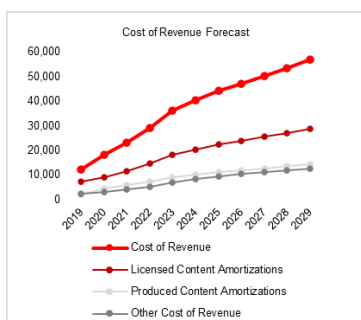


Figure 55: Cost of revenue forecast



Figure 56: Marketing expenses forecast

Marketing expenses also include payroll and related expenses for personnel that support marketing activities (Netflix Annual Report 2019). Similarly to the cost of revenue, marketing expenses are expected to grow over the forecasted period following the company plans to boost its penetration rate where the maturity phase is still not reached and to invest more on original content's production. At the end of 2019 marketing expenses amount to 2,652.46 million USD representing 13% of the company's total revenue. It is forecasted that these expenses will grow at an average rate of 18% from 2020 onwards.

▪ Research, Development, General and Administrative Expenses

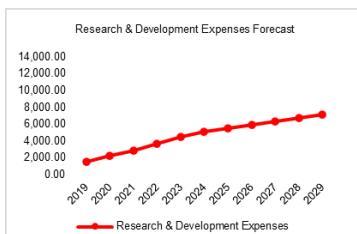


Figure 57: Research & development expenses forecast

Research and development expenses consist of payroll and related expenses for all technology personnel, as well as other costs incurred in making improvements to service offerings, including testing, maintaining, and modifying Netflix's user interface, merchandising, and streaming delivery technology and infrastructure. Technology and development expenses also include costs associated with computer hardware and software (Netflix Annual Report 2019). While reaching a mature stage in the North American market as well as in most of Western Europe countries, Netflix improved its efficiency in running its operations. Thus, research and development expenses are expected to grow at an average of 17% in the forecasted period, slightly below the 24% of the last 5 years.

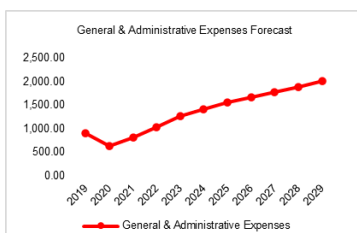


Figure 58: General & administrative expenses forecast

General and administrative expenses consist of payroll and related expenses for corporate personnel. General and administrative expenses also include professional fees and other general corporate expenses (Netflix Annual Report 2019). In 2019 general and administrative expenses reach 914.37 million USD, accounting for 5% of the entire company's total revenue. Due to the steady growth that has characterized Netflix over the last years, the headcount of personnel needed to support the increase in production and improvements in streaming service in the estimated period is not expected to be significantly different from the past. Hence, general and administrative expenses are forecasted to increase at an average rate of 17% from 2020 to 2029 compared to the previous 24%.

Streaming Content

Netflix acquires, licenses and produces content, including original programming, in order to offer its members an enhanced entertainment viewing experience. It has spent 15.0 billion USD on streaming content in 2019, more than double of Amazon's and Apple's amount (6.5 and 6.0 billion USD respectively) but less than Disney and Comcast Corporation (27.8 and 15.4 billion USD) (Variety

Intelligence Platform 2020). Streaming accounts for almost the entire revenue of the company (98.53% in 2019). Thus, the analysis of Netflix's investments in streaming content is one of the key value drivers for the company's evaluation. Some of the costs related to these investments are capitalized and some are expensed. The capitalized portion is reflected in the balance sheet both as content assets and content liabilities.

Content Assets

Content assets both licensed and produced have been recognized as "Current and Non-current content assets, net" on the consolidated balance sheet. At the end of 2019, Netflix's total content assets amount to 24,504.57 million USD and represent 72% of total assets and 122% of the total revenue. Licensed content assets account for 60% of the total content assets, while the sum of produced content released, in production content, and in development and pre-production for 40%.

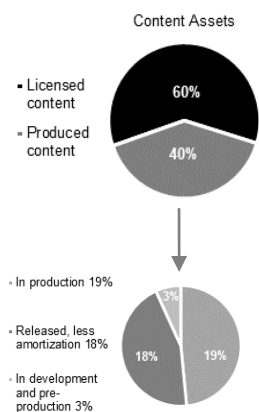


Figure 59: Content streaming assets 2019
Source: Annual Report 2019

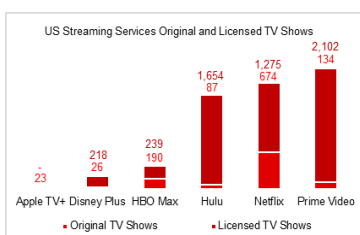


Figure 60: Licensed and original TV shows available on US streaming services Q2 2020
Source: Santos 2020

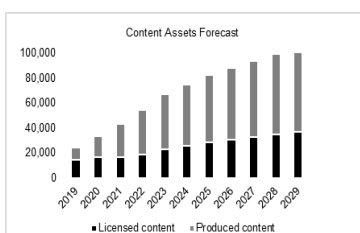


Figure 61: Content assets forecast

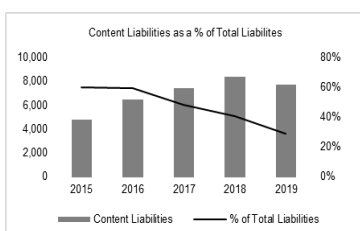


Figure 62: Content liabilities and content liabilities as a % of total liabilities 2015-2019
Source: Annual Report 2019

The higher number of SVoD platforms is in direct proportion with the boost of original contents. In the second quarter of 2020, Netflix offers 1,949 total TV shows, being Amazon the market leader with 2,236, and the highest amount of 674 originals in the US (Santos 2020). As competition in the streaming industry is rising worldwide and big players fight for licensed contents, Netflix is expected to invest even more in originals to gain competitive advantages within the SVoD industry. Thus, licensed contents as a percentage of Netflix's total streaming contents are forecasted to gradually decrease from the current rate to 35% in 2022. Afterwards Netflix will stabilize its product mix to 35/65, as its leadership strengthens. Content assets are estimated as a percentage of the total company's revenue and are likely to grow at an average rate of 16% from 2020 to 2029 hitting 106,686.24 million USD in 2029.

Content Liabilities

Content liabilities have been recognized as "Current and Non-current content liabilities" on the consolidated balance sheet according to the payment due period. Licensed content fee are capitalized per title and recorded as a liability at their gross amount once the license period begins, the cost of the title is known and the title is accepted and available for streaming. For produced content, the costs associated with the production, including development cost, direct costs and production overhead are capitalized and account as a liability in the balance sheet (Netflix Annual Report 2019). Netflix's content liabilities stand at 7,747.88 million USD at the end of 2019 and account for 38% of the total company's revenue and 32% of the content assets.

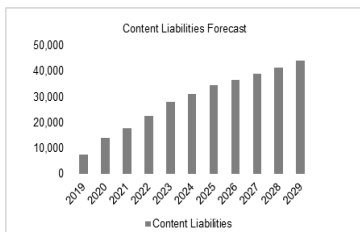


Figure 63: Content liabilities forecast

Total content liabilities have been raising at an average rate of 23% from 2015 to 2018 and marginally lowered in 2019. However, content liabilities compared to total liabilities, specifically long-term debt with payment due period longer than five years, have been steadily falling over the same period hinting that other commitments have been growing even faster than the content ones. As licensing represents the biggest component of total content liabilities and the company plans to focus more on its originals' production in the next years, content liabilities are expected to grow at a slightly lower rate over the forecasted period reaching 44,464.78 million USD in 2029.

Intrinsic Valuation

To evaluate Netflix, a discounted cash flow model combined with a market-based multiple valuation was used to come up with a fair actual share price in 2020 and estimate the gain or loss coming from an investment in Netflix stock for the timeframe of one year until the end of 2021. Total return for investors was computed considering changes in share price and net cash transactions with shareholders. Moreover, business and investments risks related to target prices and rating were analysed and the final recommendation was issued accounting for current analysts' stock criticisms.

DCF Valuation

2020 Covid Effect	FY 2019	FY 2020 Est	Annual Growth
Revenue Q1	4,520.99	5,767.69	27.58%
Comprehensive Income Q1		709.07	5.45%
Revenue Q2	4,923.12	6,148.29	24.89%
Comprehensive Income Q2	8.89%	6.60%	
Revenue Q3	5,244.91	6,435.64	22.70%
Comprehensive Income Q3	6.54%	4.67%	
Revenue Q4 Est	5,469.43	6,572.00	20.16%
Comprehensive Income Q4	4.28%	2.12%	
		615.00	
	Act 2020	24,923.62	-8.69%
	Est 2020	27,296.43	
	Act 2020	2,834.24	-22.70%
	Est 2020	3,666.44	

Figure 64: Covid-19 impact on 2020 results

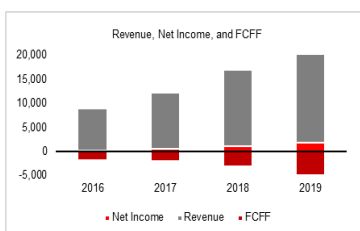


Figure 65: Revenue, net income, and FCFF 2016-2019
 Source: Annual Report 2019

In the DCF valuation, the value at the end of 2020 of free cash flow available to all the company's suppliers of capital was computed. Weighted Average Cost of Capital was used to discount values as it reflects the risk of the company and its effective after-tax cost of capital. An extended forecasted period until 2039 was considered before computing a terminal value with a perpetuity using the same nominal growth rate as the world economy (6.70%) (International Monetary Fund 2020a, b). Furthermore, Covid-19 dual impact on 2020 results was considered and related adjustments were made. Finally, three sensitivity analyses and a scenario analysis were used to evaluate the effect of the different key variables' evolutions and summarized into three alternative potential scenarios (bull, regular, and bear) weighted according to their probabilities of happening to derive an average stock price.

▪ Negative FCFF

FCFF gives information about how much money a company spends compared to how much it brings in. Netflix is spending a huge amount on originals' production while keeping cheap monthly subscriptions as the primary source of revenue. It

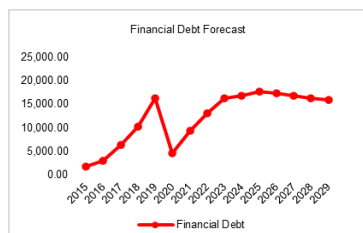


Figure 66: Financial debt 2015-2019 and Financial debt forecast
 Source: Annual Report 2019

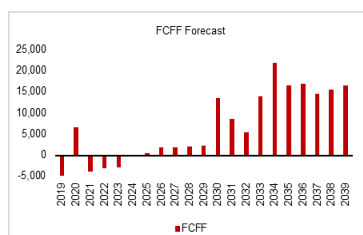


Figure 67: FCFF forecast

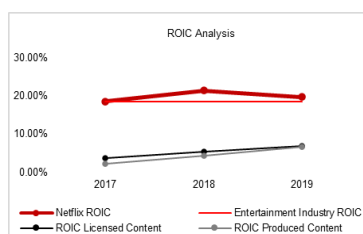


Figure 68: Netflix ROIC analysis
 Source: Damodaran 2020a

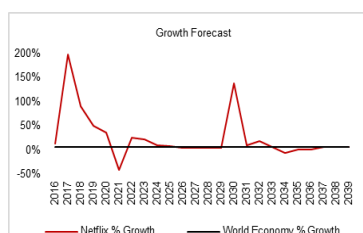


Figure 69: Netflix % growth forecast and world economy long-term estimations
 Source: International Monetary Fund 2020a,b

bears large fixed costs associated with contents and low marginal costs per subscriber. Technically, Netflix is profitable with a revenue of 20,156.45 million USD and a net income of 2,295.11 million USD in 2019. However, as the company pays its content upfront and spreads the related costs across several years in its financial statements, its cash outflows are higher than its earnings reports implied and its FCFF is negative.

The reasoning behind Netflix's negative cash flow is the timing problem related with the payments and the amortizations of its intangible assets over time. The purchase of licensed content assets and the costs associated with its production of original films and TV series are expensed over time, but Netflix needs to pay upfront for content creators. The timing discrepancy between cash flowing out and its actual recording in the company's financial statements represents the difference between earnings per share and free cash flow. To make up for these cash outflows, Netflix has accumulated billions in debt since the start of its business. Until today Netflix has always been a cash burning machine, but this trend will change once the company finds a steady state and starts growing at the same rate of the economy.

While Netflix reported positive earnings during the entire analysed period, its free cash flow turned positive for the first time in 2020 as a result of an increase in the number of paid subscriptions following 2019 large investments in content streaming made and the lockdown measures against the Covid-19 pandemic. However, free cash flow is expected to return to its negative trend in 2021 once net membership additions slow down and originals' production restarts. Starting from 2025 onwards Netflix's cash flow is expected to be positive as the company reaches a more mature and steady stage.

ROIC, Target Capital Structure and Sustainable Growth

To estimate a sustainable growth for Netflix's terminal value, the company's return on all invested capital was analysed. From 2016 to 2019 Netflix's ROIC has been increasing with produced content ROIC growing at an almost two times higher rate than the licensed content one. In the regular case, Netflix's ROIC is expected to peak at 30% in 2032 before starting to shrink slowly as the company is moving towards its mature stage. However, even if at a lower rate than 198% in 2017, 92% in 2018 and 59% in 2020, Netflix is believed to continue growing at a higher rate than the long-term estimations for the whole economy until 2025 and for the period 2030-2033 due to the additional revenue generated. The company is indeed in a developing stage of its international expansions since EMEA, Asia Pacific, and Latin America are far from reaching their saturations and it plans to increase penetration rates with the help of original content

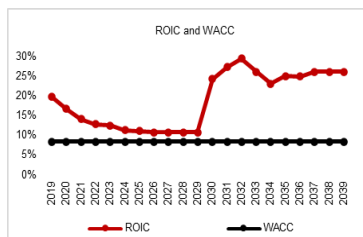


Figure 70: Netflix ROIC and WACC

For developed market firms with market cap > \$5 B				
Interest Coverage	Estimated Bond Rating	Default Spread	Cost of Debt	
8.50	100000	AAA	0.63%	4.77%
6.50	8.50	AA	0.78%	4.92%
5.50	6.50	A+	0.98%	5.12%
4.25	5.50	A	1.08%	5.22%
3.00	4.25	A-	1.22%	5.36%
2.50	3.00	BBB	1.56%	5.70%
2.25	2.50	BB+	2.00%	6.14%
2.00	2.25	BB	2.40%	6.54%
1.75	2.00	BB-	3.51%	7.85%
1.50	1.75	B	4.21%	8.35%
1.25	1.50	B-	5.15%	9.29%
0.80	1.25	CCC	8.20%	12.34%
0.79	0.80	CC	8.64%	12.78%
0.20	0.79	C	11.34%	15.48%
-100000	0.20	D	15.12%	19.26%

Figure 71: Ratings, interest coverage ratios and default spread for non-financial firms
 Source: Damodaran 2020b

Year	Average MRP
2011	5.50%
2012	5.50%
2013	5.70%
2014	5.40%
2015	5.50%
2016	5.30%
2017	5.70%
2018	5.40%
2019	5.60%
2020	5.60%

Figure 72: Average MRP
 Source: Statista 2020b

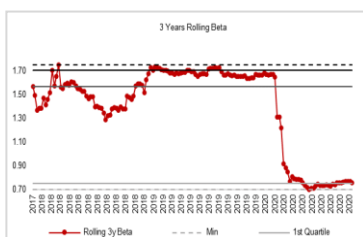


Figure 73: Netflix 3 years rolling beta
 Source: Yahoo Finance 2020

Comparable Company	Beta	D/E	DD(4S)	ED(4S)	Beta U
Amazon	0.818524	2.40%	2.35%	97.65%	0.838497128
Walt Disney	1.036195	26.87%	21.18%	78.82%	1.248447622
AT&T	0.849817	71.02%	41.53%	58.47%	1.410845259
Comcast Corporation	0.880251	59.47%	37.29%	62.71%	1.350024882
Charter Communications	0.972129	74.00%	42.53%	57.47%	1.558728954
Average					1.28068769
Netflix Beta	1.09119	7.03%	7.09%	92.91%	1.28068769
Average		46.75%	28.97%		71.03%

Figure 74: Comparables' Betas
 Source: Yahoo Finance 2020

productions. For the entire period of investigation in all the different scenarios analysed, Netflix ROIC was higher than its cost of capital, proving that the company has been steadily producing more value. Moreover, Netflix's ROIC was compared to the Entertainment industry's ROIC in 2019 and additionally decomposed to understand if the nature of its competitiveness is a result of a consumption or production advantage. Entertainment industry's ROIC amounts to 18.57% at the end of 2019 (Damodaran 2020a) and is lower than Netflix's ROIC 19.86% following an above average asset turnover that highlights the company's ability to use its asset in the production process.

For the WACC calculation, Netflix's target capital structure and cost of debt were estimated using a table that relates interest coverage ratios to a "synthetic" ratings and default spreads that go with the relative rating. The link between interest coverage ratios and ratings was developed by looking at all rated companies in the United States and default spreads are obtained from traded bonds. The sum of default spreads and 4.14% nominal risk-free rate derived from the yield of the 10Y US Treasury Note and world inflation (Fred 2020, International Monetary Fund 2020b) yield the pre-tax cost of borrowing (Damodaran 2020b). Netflix's historical interest coverage ratios were used and potential debt to equity ratio were computed starting from Netflix current ratio. Due to the company's strong preference in the past to finance itself using debt and its plans to continue to raise debt for as long as debt to enterprise value ratio and cost of debt remain low, a target capital structure with a 37.15% debt to equity ratio was selected as it combines the highest firm value and the lowest cost of capital. Thus, 4.92%, 69,806.70 million USD and 25,934.86 million USD were used respectively as cost of debt, amount of equity, and amount of debt for the WACC calculation.

WACC

To compute the WACC the cost of equity was estimated using the CAPM model. The nominal risk-free rate employed was the 4.14% yield of the 10Y US Treasury Note adjusted for the world inflation and an average market risk premium of 5.60% was obtained from historical values over the last 10 years (Statista 2020b). To compute the company's beta, the weekly excess returns of Netflix were regressed on the market's excess returns for the period from November 2015 to November 2020. From the regression, a beta equal to 1.090230 with a 95% confidence interval was derived. Additionally, the three years rolling beta was computed to observe the development of Netflix's systematic risk compared to the market. To evaluate the result of the regression beta for comparable companies (Amazon, Walt Disney, AT&T, Comcast Corporation, Charter

Assumptions	
Market Risk Premium	5.60%
rf (10 year US Bond Yield)	0.94%
Beta	1.090230
WACC	8.43%
Cost of Equity	10.25%
Cost of Debt	4.92%
Tax Rate	28.00%
E	69,806.70
D	25,934.86
Ku	5.39%
Beta u	0.794904
Growth Rate	
Sustaining Growth	6.70%
Average Growth 2030-2035	29.06%

Figure 75: WACC assumptions and growth rates

Sensitivity & Scenario Analysis

In the DCF valuation three sensitivity analyses were inserted to determine how changes in three uncertain input variables affect the implied share price. Each variable was isolated and a “What-if Analysis” of the most reasonable ranges was performed to estimate the probabilities of all the possible evolutions to happen. Inputs taken into consideration for the sensitivity analyses were the amount of forecasted paid memberships in India, a potential other revenue from 2030 to 2035, and the statutory tax rate. Afterwards, the sensitivity analyses were summarized into three alternative potential scenarios (bull, regular, and bear) that were then weighted according to their probabilities of happening. Additionally, a second scenario analysis was built to account for the effect of a product offering’s launch in China starting from 2023 on the estimated share price.

The first sensitivity analysis evaluates the forecasted number of paid memberships in India by 2029. As already delineated in the Forecast section, three potential growth outcomes were considered and the scenario predicting an average growth of 44% and 50 million subscription by 2029 was estimated to be the most likely. Netflix is expected to approach a mature stage in the Asia Pacific region around 2029. As Asia Pacific is the international sector’s area with the biggest room for growth and where the company is least mature, Netflix is expected to start growing at the same rate of the economy once it reaches a steady state in this macro-region. However, in a recent interview Netflix CEO foresaw that the company still has at least five to twenty years of growth by focusing on making its service offerings better and enhancing engagement and storytelling capabilities. He mentioned that Netflix has always added new types of programming to its content library and as animation has just begun, it will develop further in the upcoming period (Hasting 2020). The increased focus on animation came as Disney+ took off and Netflix lost the majority of Disney’s licensed content and consequently the ability to cater to family-driven subscribers (Akala 2020). Yet as Disney is already the most powerful animation franchise and as the streaming market becomes increasingly saturated, Netflix is expected to disrupt

Scenario Analysis:	
Bull Case - Expansion in India 50M, Statutory Tax Rate 28%, Revenue Increase 20%, China Launch	
Bear Case - Expansion in India 50M, Statutory Tax Rate 28%, Revenue Increase 20%, No China Launch	
Unlikely Case - Expansion in India 50M, Statutory Tax Rate 28%, No Revenue Increase, No China Launch	
Selected Case:	
Bear Case - Expansion in India 50M, Statutory Tax Rate 28%, Revenue Increase 20%, No China Launch	
Sensitivity Analyses Overview:	
Bull Case - Expansion in India 100M, 2030-2035 Other Revenue Increase 25%, Statutory Tax Rate 21%	
Regular Case - Expansion in India 50M, 2030-2035 Other Revenue Increase 20%, Statutory Tax Rate 28%	
Bear Case - Regular Expansion in India, 2030-2035 No Other Revenue Increase, Statutory Tax Rate 35%	

Figure 76: Sensitivity analyses' and scenario analysis' overviews

Sensitivity Analysis #1:	
Case 1 - Expansion in India 100M subscribers	
Case 2 - Expansion in India 50M subscribers	
Case 3 - Regular expansion in India	
Selected Case:	
Case 2 - Expansion in India 50M subscribers	

Figure 77: Sensitivity analysis #1 overview

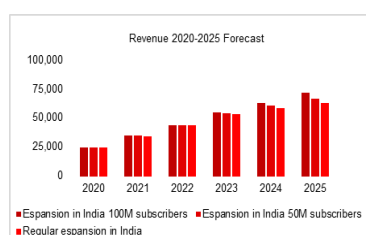


Figure 78: Revenue 2020-2025 forecast

the Entertainment and Media industry again entering a new segment to offer enhanced services that maximise engagement on many levels to its users. Following recent announcements of new game distribution services from Apple, Google, Microsoft, NVIDIA, and Tencent and a prospective Amazon offering, speculation within the industry forecasts that video games distribution will move from the still-dominant à la carte model toward Netflix-style subscriptions (Singer, D'Angelo 2020). All these things considered, video games streaming is estimated to be the most promising option for Netflix and therefore a second sensitivity analysis was introduced in the valuation by adding the other revenue capture in the income statement forecast. Starting from 2030, a revenue increase is expected for Netflix alongside with a 15% decrease in licensed content amortization and produced content amortisation because of the temporary shift in its business focus. Incorporating video games to its streaming video plans' offering is expected to boost the company's revenue for the period 2030-2035 as prices and subscriptions will increase following an enhanced users' reach. Netflix is already making large investments in marketing, research and development and therefore adding video games to its subscription is not expected to generate an extraordinary expenses' increase. Moreover, part of the cost of revenue destined to licensed content will be used to acquire video game from third parties. Thus, analogously to the first sensitivity analysis, three potential scenarios were analysed (no other revenue increase, 20% average other revenue increase and 25% average other revenue increase) with the regular scenario considered to be most likely to happen. Finally, a third sensitivity analysis was employed to evaluate the effect of a possible change in the US statutory tax rate. In 2017, the tax cut reduced US federal statutory tax rate from 35% to 21% but, with the victory of the Democratic party in the 2020 elections, the new president Joe Biden is expected to make further changes starting from 2021. Biden's tax increase plans would raise corporate taxes to 28% despite some more progressive Democrats having proposed an increase of the corporate rate all the way back to 35%. Furthermore, Biden has called for a "minimum corporate tax" of 15% for companies with net income greater than 100 million USD after accusing big tech companies of not paying enough taxes in the US (Beeman 2020). Hence, three likely possibilities were taken into account (statutory tax rate 21%, 28% and 35%) with the tax rate increase to 28% estimated to be the one with the highest probability.

The three sensitivity analyses were summarized into three plausible scenario outcomes (bull, regular, and bear) that were then weighted according to their probabilities of happening to estimate a fair price. The bull case (expansion in India 100M, 2030-2035 other revenue increase 25%, and 21% statutory tax rate)

Sensitivity Analysis #2:

Case 1 - 2030-2035: Average Other Revenue Increase 25%

Case 2 - 2030-2035: Average Other Revenue Increase 20%

Case 3 - 2030-2035: No Other Revenue Increase

Selected Case:

Case 2 - 2030-2035: Average Other Revenue Increase 20%

Figure 79: Sensitivity analysis #2 overview

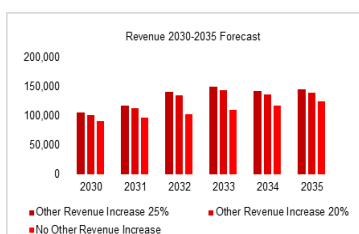


Figure 80: Revenue 2030-2035 forecast

Sensitivity Analysis #3:

Case 1 - Statutory Tax Rate 21%

Case 2 - Statutory Tax Rate 28%

Case 3 - Statutory Tax Rate 35%

Selected Case:

Case 2 - Statutory Tax Rate 28%

Figure 81: Sensitivity analysis #3 overview

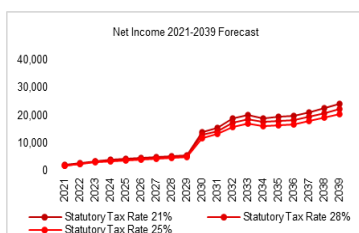


Figure 82: Net income 2021-2039 forecast

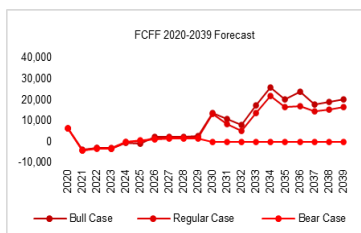


Figure 83: Sensitivity analyses overview - FCFF 2020-2039 bull case, regular case, and bear case forecast

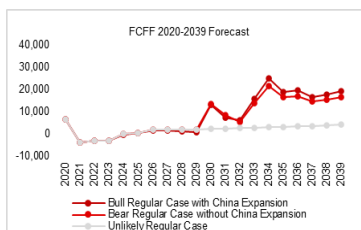


Figure 84: Sensitivity and scenario analyses overview - FCFF 2020-2039 bull regular case with China expansion, bear regular case without China expansion, and unlikely regular case



Figure 85: China paid memberships forecast and penetration rate

Sensitivity and Scenario Analysis Overview		
Selected Case	Price	Weight
Bull Case	671.42	10%
Regular Case	623.79	85%
with China Launch	744.80	5%
without China Launch	617.42	95%
Unlikely Case	155.90	0%
Bear Case	137.88	5%
Implied share Price	604.26	

Figure 86: Sensitivity and scenario analyses overview

	Price Multiples		Enterprise Value Multiples	
	Trailing P/E	P/Sales	EV/EBITDA	EV/Revenue
Netflix Price 31.12.2021	294.99	178.04	268.65	245.32
Average	246.75			
Netflix Price 31.12.2021	431.29	261.10	200.04	348.12
Average	310.14			

Figure 87: Market-based valuation
Source: Yahoo Finance 2020

was considered with a probability of 10%, while the regular case (expansion in India 50M, 2030-2035 other revenue increase 20%, and 28% statutory tax rate) accounted for 85% and the bear case (regular expansion in India, 2030-2035 no other revenue increase, and 35% statutory tax rate) for 5%. Additionally, a scenario analysis was introduced in the regular case to account for a potential launch in China in 2023. The regular case was decomposed into three possible scenarios (with China launch, without China launch and without any additional revenue increased) weighted 5%, 95% and 0% respectively.

The main reasons for targeting China beside the fact that it is the biggest Asian country and would therefore significantly boost Netflix's market share, are the very little competition and the limited amount of licensed content currently offered on the market. Thus, it is reasonable to assume that the new market would be receptive to Netflix's services and offerings. As Netflix's yearly cost usually amounts to 30% of an average person's income of a country (Clark 2018) and the average annual salary in China in 2019 was 13,855.50 USD (Statista 2019g), Netflix's launch ARPU is expected to be 3.00 and then slightly decrease before growing with the inflation from 2026 onwards. Paid memberships are estimated to be 6.30 million in 2023 and reach 533.70 by 2039 generating a revenue of 27,913.57 million USD.

To sum up, an intrinsic price of 623.79 (85%) coming from the scenario analysis was assigned to the regular case and added to the bull price of 671.42 (10%) and the bear price of 137.88 (5%) in a weighted linear combination resulting in an implied share price of 604.26.

Market-Based Valuation

To evaluate the result from the discounted cash flow valuation, a market-based valuation was used. Netflix's firm value was compared to the one of its main competitors (Amazon, Walt Disney, AT&T, Comcast Corporation, and Charter Communications) that operate internationally in the streaming video-on-demand industry. Standardized price multiples (Trailing Price-to-Earnings ratio and Price-to-Sales ratio) and enterprise value multiples (Enterprise value-to-EBITDA and Enterprise value-to-Revenue) were analysed to value Netflix based on its competitors' value. As all the comparable companies operate in multiple business sectors, the results of the multiple analysis are not to be considered particularly relevant for Netflix's valuation.

Business and Investment Risks

Netflix is facing specific risks related to its business and target prices and rating. An adverse impact to its business could in fact come from changes in the

competitive offerings, including the potential adoption of piracy-based video offerings. Furthermore, payment processing, cybersecurity, economic, and political risks as well as insufficient cash to service debts and obligations might hinder the delivery of its streaming content (Netflix Annual Report 2019).

In the past Netflix's stock has shown sensitivity to missing quarterly subscribers estimates, especially if perceived to be related to competition or pricing power. Competition affecting subscriber growth or content costs could also have a negative effect on its share price. Moreover, Netflix relies on licensed content from traditional media companies and their extent of pulling back on content supply directly affects the market's valuation. Netflix projections are expected to reach large scale as the company has continuously demonstrated to be able to overcome difficulties in managing content production and maintaining high execution level. However, failures or administrative inefficiencies could lead to a stock shrink on the long run. Finally, regulations represent a big threat for the stock following the company's tendency to break into new international markets although it has avoided privacy issues related to digital advertising (Mitchelson, Russo, Durkin, Joslin 2018).

Risks to Business - Investment	
Business	Changes in competitive offerings (piracy-based video) Payment processing Cybersecurity Economic Political
Investment	Missing quarterly subscriber estimates Competition / Content Costs Access to content Scale challenges Regulations

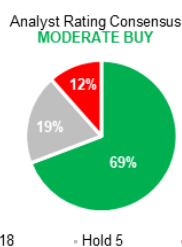
Figure 88: Business and investment risks
Source: Mitchelson, Russo, Durkin, Joslin 2018

Enterprise Value 12/31/2020	267,239.64
Net Debt	4709.11
Non core invested capital	829.54
Equity Value	272,778.29
Shares Outstanding (in million)	441.80
Implied Share Price	617.42
Implied Average Share Price	604.26
Actual Share Price	536.92
Difference to calculated share price	15.0%

Enterprise Value 12/31/2021	260,532.12
Net Debt	9,364.63
Non core invested capital	1,156.51
Equity Value	271,053.26
Shares Outstanding (in million)	420.00
Implied Share Price	645.36

Gain/loss from investment (12/31/2020-12/31/2021)	58.11%
--	--------

Figure 89: Valuation results DCF valuation



Analyst Price Target - 12 Months Forecast		
High	Average	Low
700.00 USD	579.61 USD	235.00 USD

Figure 90: Wall Street analysts rating consensus for the next 12 months (Based on 26 Wall Street analysts)
Source: Tipranks 2020

Booming Business or House of Cards?

According to the DCF valuation's most likely regular case without considering a launch in China, an investment in Netflix's stock at the end of 2020 will generate a gain of 58.11% in 2021. Currently Netflix is not paying dividends and it is not expected to start anytime soon as it continues to use its cash flow on growth initiatives to increase its paid memberships and it has a high amount of debt outstanding. However, Netflix is expected to buyback some share in 2021 as it has done in 2020 to avoid its stock to slump due to the slowdown of subscriptions' growth and resulting in a positive payout ratio for its shareholders.

Netflix's negative free cash flow has long been a battleground metric for bulls and bears and therefore some investors consider it only a long-term opportunity (Vena 2020). Nonetheless, Wall Street analysts rating consensus for the next 12 months is still a buy recommendation despite the stock's high volatility (Tipranks 2020). It is not the real value of the company that drives its stock price, but rather the most popular story people believe about it and Netflix still holds on to the crown of innovation making investors confident about a big room to grow in the near future. All these things considered, even if Netflix looks and acts like a booming business, it might also be a House of Cards but as of 31.12.2020 an investor should buy Debtflix and (moderately) chill.

References

- Pavel Neilson. 2018. "Netflix Business Model Strategy". Last accessed December 5. https://www.youtube.com/watch?v=ZKrtUB-kMJc&t=4s&ab_channel=BusinessDisruptors
- Nathan McAlone. 2015. "The father of 'disruption' theory explains why Netflix is the perfect example – and Uber isn't". Last accessed December 5. <https://www.businessinsider.com/the-father-of-disruption-theory-explains-why-netflix-is-the-perfect-example-and-uber-isnt-2015-11?r=DE&IR=T>
- Amelia Moore. 2019. "Netflix's Generic Strategy, Business Model & Intensive Growth Strategies". Last accessed December 5. <https://www.rancord.org/netflix-business-model-generic-strategy-intensive-growth-strategies-competitive-advantage>
- Travis Clark. 2020. "Netflix has lost 3,000 movies in the last decade, but its originals catalog has soared to 1,100". Last accessed December 5. <https://www.businessinsider.com/how-netflix-movie-and-tv-show-catalog-changed-over-time-2020-2?r=DE&IR=T>
- Daniel Pateman. 2020. "Disney Plus price: bundle costs and sign up deals compared". Last accessed December 16. <https://www.techradar.com/deals/disney-plus-price>
- Netflix Annual Report 2019. Last accessed November 20. https://s22.q4cdn.com/959853165/files/doc_financials/2019/ar/2019-10-K.pdf
- Sarah Perez. 2020. "Netflix is still saying 'no' to ads". Last accessed December 5. <https://techcrunch.com/2020/01/22/netflix-is-still-saying-no-to-ads/>
- Kathryn Roethel Rieck. 2020. "Netflix has unparalleled customer retention. Can Disney or Apple shake it?". Last accessed December 5. <https://secondmeasure.com/datapoints/netflix-disney-plus-apple-customer-retention/>
- Financial Express. 2020. "Netflix – The best performing S&P stock of the last decade". Last accessed November 19. <https://www.financialexpress.com/investing-abroad/stockal-specials/netflix-the-best-performing-sp-stock-of-the-last-decade/1952454/>
- Yahoo Finance. 2020. Last accessed November 19. <https://finance.yahoo.com/quote/NFLX/holders?p=NFLX>
- Macrotrends. 2020a. "Netflix PE Ratio 2006-2020". Last accessed December 16. <https://www.macrotrends.net/stocks/charts/NFLX/netflix/pe-ratio>
- Macrotrends. 2020b. "Earnings per Share 2006-2020". Last accessed December 16. <https://www.macrotrends.net/stocks/charts/NFLX/netflix/eps-earnings-per-share-diluted>
- Forbes. 2020. "Netflix Stock Up 14% In 2020 At \$375 Despite COVID-19; Is It Sustainable?". Last accessed December 15. <https://www.forbes.com/sites/greatspeculations/2020/04/02/netflix-stock-up-14-in-2020-at-375-despite-covid-19-is-it-sustainable/?sh=271a71e030e4>

- Jon Swartz, Jeremy C. Owens. 2020. "Netflix subscription gains screech lower as pandemic wears on, stock falls 5%". Last accessed December 15. <https://www.marketwatch.com/story/netflix-subscription-gains-screch-lower-as-pandemic-wears-on-stock-falls-5-11603224575>
- Todd Spangler. 2020a. "Netflix Stock Shoots Up 11.6% to Near All-Time High on Optimism for Growth". Last accessed December 15. <https://variety.com/2020/digital/news/netflix-stock-near-all-time-high-optimism-growth-1234749939/>
- Will Healy. 2020. "The Coronavirus Vaccine Is a Negative for Netflix Stock for This Reason". Last accessed December 15. <https://www.fool.com/investing/2020/11/11/the-coronavirus-vaccine-is-a-negative-for-netflix/>
- Alan Farley. 2020. "Netflix (NFLX) Could Rally Into Year End". Last accessed November 19. <https://www.investopedia.com/netflix-nflx-could-rally-into-year-end-5089608>
- Netflix Q1 Shareholder Letter. 2020. Last accessed December 15. http://q4live.s22.clientfiles.s3-website-us-east-1.amazonaws.com/959853165/files/doc_financials/2020/q1/FINAL-Q1-20-Shareholder-Letter.pdf
- Netflix Q2 Shareholder Letter. 2020. Last accessed December 15. https://s22.q4cdn.com/959853165/files/doc_financials/2020/q2/FINAL-Q2-20-Shareholder-Letter.pdf
- Netflix Q3 Shareholder Letter. 2020. Last accessed December 15. https://s22.q4cdn.com/959853165/files/doc_financials/2020/q3/FINAL-Q3-20-Shareholder-Letter.pdf
- Statista. 2019a. "Netflix's average monthly revenue per paying customer worldwide from 2016 to 2019". Last accessed November 19. <https://www.statista.com/statistics/976588/netflix-monthly-streaming-revenue-per-customer/>
- Stock Analysis on Net. 2020. "Netflix Inc. Analysis of Ratios". Last accessed December 15. <https://www.stock-analysis-on.net/NASDAQ/Company/Netflix-Inc/Ratios/>
- Avasant. 2020. "Media & Entertainment industry: an overview". Last accessed November 19. <https://avasant.com/insights/publications/technology-optimization/media-entertainment-industry-an-overveiw/>
- PwC. 2019. "Perspectives from the Global Entertainment & Media Outlook 2019–2023". Last accessed November 19. <https://www.pwc.com/gx/en/entertainment-media/outlook-2019/entertainment-and-media-outlook-perspectives-2019-2023.pdf>
- Deloitte. 2019a. "Digital media trends survey, 13th edition". Last accessed November 19. https://www2.deloitte.com/content/dam/Deloitte/It/Documents/technology-media-telecommunications/LT_DI_Digital-media-trends-13th-edition.pdf
- Vodlix 2020. Last accessed November 2019. <https://vodlix.com/difference-between-vod-and-ott-and-the-terms-svod-avod-tvod/>

- Erik Gruenwedel. 2020. Report: U.S. Dominates Global SVOD Revenue. Last accessed November 19. <https://www.mediaplaynews.com/report-u-s-dominates-global-svod-revenue/>
- Leichtman Research Group. 2020. "78% of U.S. Households Have an SVOD Service". Last accessed November 19. <https://www.leichtmanresearch.com/78-of-u-s-households-have-an-svod-service/>
- Deloitte. 2019b. "The future of the TV and video landscape by 2030". Last accessed November 20. <https://mkto.deloitte.com/rs/712-CNF-326/images/the-future-of-the-tv-and-video-2030.pdf>
- Mordor Intelligence. 2020. Over The Top (OTT) Market – Growth, Trend, and Forecasts (2020-2025). Last accessed December 16. <https://www.mordorintelligence.com/industry-reports/over-the-top-market>
- Statista. 2020a. "Share of subscription video on demand (SVoD) subscribers who also subscribe to other services in the United States in October 2020, by service. Last accessed December 16. <https://www.statista.com/statistics/778912/video-streaming-service-multiple-subscriptions/>
- Adrian Pennington. 2019. "Streaming wars set to enter the next chapter". Last accessed November 20. <https://www.csimagazine.com/csi/Streaming-wars-set-to-enter-the-next-chapter.php>
- Tracxn Feed Report. 2020. "OTT Video". Last accessed 15 December 2020.
- Arjun Kharpal. 2019. "Verizon completes its \$4.48 billion acquisition of Yahoo; Marissa Mayer leaves with \$23 million". Last accessed November 20. <https://www.cnbc.com/2017/06/13/verizon-completes-yahoo-acquisition-marissa-mayer-resigns.html>
- Reuters Staff. 2019. "Disney closes \$71 billion acquisition of Twenty-First Century Fox's assets". Last accessed November 20. <https://www.reuters.com/article/us-fox-m-a-disney-idUSKCN1R11OG>
- Arriana McLymore, Diane Bartz. 2020. "T-Mobile completes merger with Sprint". Last accessed November 20. <https://www.reuters.com/article/us-sprint-corp-m-a-t-mobile-us/t-mobile-completes-merger-with-sprint-idUSKBN21J5Q2>
- Mara Leighton. 2019. "Prime Video Channels lets you add specific channels like HBO, STARZ, and Showtime to your account — here's how it can help you cut the cord without sacrificing anything". Last accessed November 20. <https://www.businessinsider.com/amazon-prime-video-channels?IR=T>
- Eli Blumenthal. 2019. "Hulu and Spotify partner to bundle TV and music streaming for \$9.99 per month". Last accessed November 2020. <https://eu.usatoday.com/story/tech/talkingtech/2019/03/12/apple-looming-hulu-and-spotify-partner-9-99-streaming-bundle/3138377002/>
- Owen S. Good. 2019. "Sony and Microsoft team up on cloud gaming, ahead of Google Stadia". Last accessed November 20. <https://www.polygon.com/2019/5/16/18628245/sony-microsoft-collaboration-google-stadia-cloud-gaming>

- Netflix. 2017. "Netflix Acquires Millarworld". Last accessed November 20. <https://about.netflix.com/en/news/netflix-acquires-millarworld-1>
- Netflix. 2019. "Netflix acquires the critically and fan-acclaimed StoryBots property and commits to bringing educational content to kids and families around the world". Last accessed November 20. <https://about.netflix.com/en/news/netflix-acquires-the-critically-and-fan-acclaimed-storybots-property-and-commits-to-bringing-educational-content-to-kids-and-families-around-the-world>
- AnalyzeMarkets. 2020. "Netflix to Raise USD 1bn Debt for Potential Acquisitions and Operations". Last accessed November 20. <https://www.analyzemarkets.com/en/intelligence/netflix-to-raise-usd-1bn-debt-for-potential-acquisitions-and-operations>
- Alex Sherman. 2020. MGM leads 2020 media acquisition targets as the entertainment world splits into haves and have-nots. Last accessed November 20. <https://www.cnbc.com/2020/01/24/mgm-leads-2020-media-acquisition-targets.html>
- Reed Hasting. 2020. Netflix's Hastings Predicts More Consolidation in Streaming Market. Last accessed November 20. https://www.youtube.com/watch?v=KksePJPz-KE&ab_channel=BloombergTechnology
- Gavin Bridge. 2019. "Top 19 Media Trends of 2019: Mega Mergers". Last accessed November 20. <https://variety.com/2019/biz/opinion/top-19-media-trends-of-2019-mega-mergers-1203434577>
- Scott Roxborough. 2019. "Partnership Deals Give Netflix Access to More Than 300M Households, Report Finds". Last accessed November 20. <https://www.hollywoodreporter.com/news/partnership-deals-give-netflix-access-more-300-m-households-1258629>
- Business Strategy Hub. 2020. "Netflix Business Model | How does Netflix make money". Last accessed November 20. <https://bstrategyhub.com/netflix-business-model-how-does-netflix-make-money/>
- Guy Bisson. 2020. "77th Venice Film Festival - EUROVOD Conference: Ampere Analysis". Last accessed November 19. <https://youtu.be/Xgls8SXJWHk?t=2613>
- Jill Disis. 2019. "Disney is taking full control of Hulu". Last accessed November 20. <https://edition.cnn.com/2019/05/14/media/disney-buys-comcast-hulu-ownership/index.html>
- Statista 2019b. "Actual and targeted broadband internet penetration rate in China according to the "Made in China 2025" strategic plan from 2013 to 2025". Last accessed November 20. <https://www.statista.com/statistics/1010271/china-internet-penetration-as-targeted-by-made-in-china-2025-plan/>
- eMarketer Editors. 2020. "US Pay TV Suffers Historic Cord-Cutting". Last accessed November 20. <https://www.emarketer.com/content/pay-tv-suffers-historic-cord-cutting>
- Macrotrends. 2020c. "Disney Revenue 2006-2020". Last accessed December 15. <https://www.macrotrends.net/stocks/charts/DIS/disney/revenue>

- Adam Levine-Weinberg. 2020. "Disney+ Caps a Year of Incredible Growth". Last accessed December 15. <https://www.nasdaq.com/articles/disney-caps-a-year-of-incredible-growth-2020-11-15>
- Trefis Team. 2019. "Numbers Behind Streaming Wars Between Netflix, Disney, AT&T, And Viacom". Last accessed December 15. <https://www.nasdaq.com/articles/numbers-behind-streaming-wars-between-netflix-disney-att-and-viacom-2019-09-13>
- Todd Spangler. 2020b. "Disney Plus to Increase Prices in Early 2021, Eyes Up to 260M Subscribers by End of 2024". Last accessed December 15. <https://variety.com/2020/digital/news/disney-plus-hits-86-8-million-subscribers-1234850846/>
- Macrotrends. 2020d. "AT&T Revenue 2006-2020". Last accessed December 15. <https://www.macrotrends.net/stocks/charts/T/at-t/revenue>
- Ben Murson. 2020. "The top 6 cable, satellite and telco pay TV operators in the second quarter of 2020: Ranking Comcast, DirecTV, Charter and more". Last accessed December 15. <https://www.fiercevideo.com/cable/top-6-cable-satellite-and-telco-pay-tv-operators-second-quarter-2020-ranking-comcast-directv>
- Macrotrends. 2020e. "Charter Communications Revenue 2006-2020". Last accessed December 15. <https://www.macrotrends.net/stocks/charts/CHTR/charter-communications/revenue>
- Macrotrends. 2020f. "Comcast Revenue 2006-2020". Last accessed December 15. <https://www.macrotrends.net/stocks/charts/CMCSA/comcast/revenue>
- Statista 2019c. "Monthly revenue per user (ARPU) generated by Charter Communications from 2011 to 2019". Last accessed December 15. <https://www.statista.com/statistics/624145/charter-arpu/>
- Statista 2019d. "Comcast video average revenue per user (ARPU) from 1st quarter 2010 to 4th quarter 2018. Last accessed December 15. <https://www.statista.com/statistics/778799/comcast-video-arpu/>
- Deloitte. 2020. "Covid-19 Accelerates Cycle of Paid Entertainment Subscriptions and Cancellations". Last accessed December 15. <https://www2.deloitte.com/us/en/pages/about-deloitte/articles/press-releases/digital-media-trends.html>
- KPMG. 2020. "What COVID-19 means for the media and entertainment industry". Last accessed December 15. <https://assets.kpmg/content/dam/kpmg/ca/pdf/2020/05/covid-19-media-and-entertainment-industry-en.pdf>
- Capgemini. 2020. "Covid-19 Outbreak Global Outlook". Last accessed December 15. <https://www.capgemini.com/wp-content/uploads/2020/06/Covid-19-Impact-on-Media-Entertainment-industry.pdf>
- PwC. 2020. "Covid-19 and the media industry". Last accessed December 15. <https://www.pwc.com/us/en/library/covid-19/coronavirus-impacts-media.html>

- Cynthia Littleton, Janko Roettgers. 2018. "Ted Sarandos on How Netflix Predicted the Future of TV". Last accessed November 21. <https://variety.com/2018/digital/news/netflix-streaming-dvds-original-programming-1202910483/>
- Statista. 2019e. "Unit sales of DVD players in the United States from 2014 to 2019". Last accessed November 21. <https://www.statista.com/statistics/191275/dvd-players-unit-sales-in-the-us/>
- Statista. 2019f. "Countries with the highest number of internet users as of December 2019". Last accessed November 15. <https://www.statista.com/statistics/262966/number-of-internet-users-in-selected-countries/>
- Tyler Cooper. 2020. "The Decade in Broadband: 2020 Statistics & Predictions". Last accessed November 15. <https://broadbandnow.com/research/broadband-2020>
- International Monetary Fund. 2020a. "Real GDP growth. Annual percent change". Last accessed November 15. <https://www.imf.org/external/datamapper/>
- Research and Markets. 2020. "The SVOD Market in Latin America to 2025 - Netflix Will Have 47.4 Million Subscriptions by 2025; Disney+ Will Have 25 Million Subs". Last accessed November 15. <https://www.prnewswire.com/news-releases/>
- Digital TV News. 2020. "Digital TV News: Digital TV Research". Last accessed November 16. <https://www.digitaltvnews.net/>
- Alina Brentnall. 2020. "The Streaming Wars Hit Western Europe". Last accessed November 16. <https://www.emarketer.com/content/streaming-wars-hit-western-europe>
- Piotr Gaber. 2020. "Netflix seeks partnerships in Eastern Europe". Last accessed November 16. <https://www.spglobal.com/marketintelligence/en/news-insights/blog/netflix-seeks-partnerships-in-eastern-europe>
- Namrata Sen Chanda. 2019. "Netflix India Sees 700% Revenue Growth in Fiscal 2019". Last accessed November 16. <https://marketrealist.com/2019/11/netflix-india-sees-700-revenue-growth-in-fiscal-2019/>
- GlobalData Technology. 2020. "Finding the way to the top of the Asian over-the-top video market". Last accessed November 16. <https://www.verdict.co.uk/ott-video-asia/>
- Digital TV Research. 2020. "Asia Pacific SVOD Forecasts". Last accessed November 17. <https://www.digitaltvresearch.com/products/product?id=296>
- Netflix. 2020. "Plans and Pricing". Last accessed November 15. <https://help.netflix.com/de/node/24926/us>
- Meira Gebel. 2020. "Yes, Netflix still mails DVDs — here's how to sign up for Netflix's DVD Plan, and rent movies with no late fees". Last accessed November 15. <https://www.businessinsider.com/does-netflix-still-mail-dvds?>

- Joan E. Solsman, Ry Crist. 2020. "Netflix price hikes raise US cost of most popular plan by a dollar". Last accessed November 15. <https://www.cnet.com/news/netflix-raising-price-increase-2020/>
- International Monetary Fund. 2020b. "Inflation rate, average consumer prices". Last accessed November 15. <https://www.imf.org/external/datamapper/>
- Next Level Finance. 2020. "Netflix content spend, explained". Last accessed November 16. <https://nextlevel.finance/netflix-content-spend/>
- Etan Vlessing. 2020. "Netflix to Invest \$17.3 Billion in Content in 2020, Analyst Estimates". Last accessed November 17. <https://www.hollywoodreporter.com/news/netflix-invest-173-billion-content-2020-analyst-estimates-1270435>
- Variety Intelligence Platform. 2020. "2019 Original Content Spend Estimates". Last accessed November 17. <https://1z1euk35x7oy36s8we4dr6lo-wpengine.netdna-ssl.com/wp-content/uploads/2018/11/netflix-original-spend-vs-rivals.png>
- Maria Santos. 2020. "Original and Licensed TV Shows Available on U.S. Streaming Services". Last accessed November 18. <https://blog.reelgood.com/original-and-licensed-tv-shows-available-on-u-s-streaming-services>
- Aswath Damodaran. 2020a. "Margin/ ROIC by Sector (US)". Last accessed December 5. http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/mgnroc.html
- Fred. 2020. "10-Year Treasury Constant Maturity Rate". Last accessed December 5. <https://fred.stlouisfed.org/series/DGS10>
- Statista. 2020b. "Average market risk premium in the United States from 2011 to 2020". Last accessed December 5. <https://www.statista.com/statistics/664840/average-market-risk-premium-usa/#:~:text=The%20average%20market%20risk%20premium,and%205.7%20percent%20since%202011.>
- Aswath Damodaran. 2020b. "Ratings, Interest Coverage Ratios and Default Spread". Last accessed November 20. http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ratings.htm
- Adedayo Akala. 2020. "How Netflix plans to use animation to challenge Disney Plus". Last accessed December 5. <https://www.cnbc.com/2020/02/08/how-netflix-plans-to-use-animation-to-challenge-disney-plus.html>
- Dan Singer, Enrico D'Angelo. 2020. "The Netflix of gaming? Why subscription video-game services face an uphill battle". Last accessed December 5. <https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-netflix-of-gaming-why-subscription-video-game-services-face-an-uphill-battle#>
- Ray Beeman. 2020. "Post-2020 tax policy possibilities". Last accessed December 16. https://www.ey.com/en_us/tax/post-2020-tax-policy-possibilities

- Travis Clark. 2018. "How much Netflix costs in different countries around the world, and which ones get the best deal". Last accessed December 16. <https://www.businessinsider.com/countries-where-netflix-is-most-least-expensive-or-cost-effective-2018-9?IR=T>
- Statista. 2019g. "Average annual income of employees working for urban non-private units in China, in 2019, by region". Last accessed December 16. <https://www.statista.com/statistics/278350/average-annual-salary-of-an-employee-in-china-by-region/>
- Douglas Mitchelson, Brian Russo, Meghan Durkin, Grant Joslin. 2020. "Netflix Inc.". Last accessed December 16. https://plus.credit-suisse.com/rpc4/ravDocView?docid=_XWaA2AN-Ytkb
- Danny Vena. 2020. "Netflix Just Proved 2 Aspects of the Stock's Bull Thesis". Last accessed December 31. <https://www.nasdaq.com/articles/netflix-just-proved-2-aspects-of-the-stocks-bull-thesis-2020-10-24>
- Tipranks. 2020. "Netflix Stock Forecast & Price Targets". Last accessed December 31. <https://www.tipranks.com/stocks/nflx/forecast>

Appendix – Financial Statements

Income Statement

Netflix Inc (NFLX US) - IS Forecast																
In Millions of USD except Per Share 12 Months Ending	FY 2015 12/31/2015	FY 2016 12/31/2016	FY 2017 12/31/2017	FY 2018 12/31/2018	FY 2019 12/31/2019	FY 2020 Est 12/31/2020	FY 2021 Est 12/31/2021	FY 2022 Est 12/31/2022	FY 2023 Est 12/31/2023	FY 2024 Est 12/31/2024	FY 2025 Est 12/31/2025	FY 2026 Est 12/31/2026	FY 2027 Est 12/31/2027	FY 2028 Est 12/31/2028	FY 2029 Est 12/31/2029	
Revenue	6,779.51	8,830.67	11,692.71	15,794.34	20,156.45	24,923.62	34,747.64	43,981.16	54,232.85	60,527.07	66,574.68	70,848.00	75,413.84	80,293.25	85,508.86	
Streaming Revenue	6,133.77	8,288.40	11,242.22	15,428.75	19,859.23	27,058.65	34,569.31	43,891.99	54,232.85	60,527.07	66,574.68	70,848.00	75,413.84	80,293.25	85,508.86	
Domestic Streaming (US)	4,180.34	5,077.31	6,153.03	7,646.65	9,243.01	10,151.52	11,725.00	12,926.82	14,251.81	14,842.10	15,456.83	16,097.02	16,763.72	17,458.04	18,181.12	
International Streaming	1,953.44	3,211.10	5,089.19	7,782.11	10,616.23	16,907.14	22,844.30	30,965.18	39,981.04	45,684.96	51,117.85	54,750.99	58,650.12	62,835.20	67,327.74	
Canada		507.88	634.85	808.20	1,028.08	1,461.77	1,688.35	1,881.40	1,946.10	2,020.75	2,098.26	2,178.75	2,262.33	2,349.11		
Europe, Middle East and Africa		2,362.80	3,963.70	5,543.10	7,861.12	11,498.97	15,092.39	19,016.42	20,173.40	21,400.77	22,702.82	24,084.09	25,549.39	27,103.85		
Latin America		1,642.60	2,237.80	2,795.40	3,780.17	4,436.79	5,093.61	5,637.10	6,084.91	6,536.41	7,021.41	7,542.40	8,102.04	8,703.22		
Asia-Pacific		575.90	945.80	1,469.50	3,157.77	5,446.78	9,090.83	13,466.12	17,480.58	21,159.92	22,928.49	24,844.88	26,921.44	29,171.56		
Domestic DVD	645.74	542.27	450.50	365.59	297.22	237.77	178.33	89.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Revenue																
Cost of Revenue	-4,591.48	-6,257.46	-8,033.00	-9,967.54	-12,440.21	-16,624.85	-23,177.79	-29,336.48	-36,175.05	-40,373.50	-44,407.44	-47,257.89	-50,303.45	-53,558.17	-57,037.15	
Licensed Content Amortizations		-5,680.37	-6,511.69	-7,242.80	-8,474.03	-11,814.20	-14,963.59	-18,439.17	-20,579.20	-22,635.39	-24,088.32	-25,640.71	-27,299.70	-29,073.01		
Produced Content Amortizations		-517.44	-1,020.40	-1,973.45	-4,237.02	-5,907.10	-7,476.80	-9,219.59	-10,289.60	-11,317.70	-12,044.16	-12,820.35	-13,648.85	-14,536.51		
Other Cost of Revenue		-1,835.19	-2,435.45	-3,227.97	-3,913.81	-5,456.49	-6,906.45	-8,516.30	-9,504.69	-10,454.36	-11,225.14	-12,125.41	-13,042.39	-12,608.61	-13,427.63	
Operating Expenses	-1,882.21	-2,193.41	-2,821.03	-4,221.58	-5,111.98	-6,422.46	-8,953.97	-11,333.31	-13,975.03	-15,596.96	-17,155.34	-18,256.51	-19,433.06	-20,690.42	-22,034.40	
Selling, General & Admin	-1,231.42	-1,413.18	-1,867.32	-2,999.76	-3,566.83	-4,329.23	-6,035.66	-7,639.53	-9,420.25	-10,513.55	-11,564.02	-12,306.30	-13,099.38	-13,946.94	-14,852.89	
Selling & Marketing	-824.09	-1,097.52	-1,436.28	-2,969.47	-3,652.46	-3,741.04	-5,215.62	-6,801.57	-8,140.35	-9,085.11	-9,992.86	-10,639.21	-11,319.62	-12,052.02	-12,834.88	
General & Administrative	-407.33	-315.66	-431.04	-630.29	-914.37	-588.20	-820.04	-1,037.96	-1,279.90	-1,428.44	-1,571.16	-1,672.01	-1,779.77	-1,894.92	-2,018.01	
Research & Development	-650.79	-780.23	-953.71	-1,221.81	-1,545.15	-2,093.23	-2,918.30	-3,693.79	-4,554.78	-5,083.40	-5,591.32	-5,992.31	-6,333.68	-6,743.48	-7,181.52	
Core result before taxes and OCI	305.83	379.79	838.68	1,605.23	2,604.25	1,876.31	2,615.88	3,311.00	4,082.78	4,556.62	5,011.90	5,333.60	5,677.33	6,044.66	6,437.31	
Adjusted taxes	-76.62	-115.58	-50.07	-94.76	-309.14	-148.50	-392.38	-496.65	-612.42	-683.49	-751.78	-800.04	-851.60	-906.70	-965.60	
Core result	229.20	264.21	788.61	1,510.47	2,295.11	1,727.81	2,223.50	2,814.35	3,470.36	3,873.13	4,260.11	4,533.56	4,825.73	5,137.96	5,471.71	

Netflix Inc (NFLX US) - IS Extended Forecast											
In Millions of USD except Per Share 12 Months Ending	FY 2030 Est 12/31/2030	FY 2031 Est 12/31/2031	FY 2032 Est 12/31/2032	FY 2033 Est 12/31/2033	FY 2034 Est 12/31/2034	FY 2035 Est 12/31/2035	FY 2036 Est 12/31/2036	FY 2037 Est 12/31/2037	FY 2038 Est 12/31/2038	FY 2039 Est 12/31/2039	
Revenue	101,579.00	113,057.75	136,078.49	145,082.76	137,086.62	139,960.92	142,644.46	152,230.10	162,496.84	173,494.52	
Streaming Revenue	91,084.99	97,047.61	103,425.41	110,248.05	117,548.23	125,360.92	133,723.75	142,677.19	152,464.78	162,533.40	
Domestic Streaming (US)	18,934.15	19,718.36	20,535.06	21,385.58	22,271.32	23,193.76	24,154.40	25,154.82	26,196.69	27,281.70	
International Streaming	72,150.85	77,329.44	82,890.36	88,862.47	95,276.90	102,167.16	109,569.35	117,522.36	126,088.10	135,251.69	
Canada	2,430.23	2,532.79	2,629.99	2,730.84	2,835.59	2,944.37	3,057.31	3,174.59	3,296.37	3,422.82	
Europe, Middle East and Africa	28,752.88	30,502.24	32,358.04	34,326.74	36,415.22	38,630.76	40,981.11	43,474.45	46,119.49	48,925.45	
Latin America	9,348.99	10,042.69	10,787.86	11,588.32	12,448.17	13,371.82	14,364.01	15,429.82	16,574.72	17,804.56	
Asia-Pacific	31,609.75	34,251.72	37,114.51	40,216.58	43,577.92	47,220.21	51,166.92	55,443.50	60,077.53	65,098.67	
Domestic DVD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Revenue	11.52%	16.55%	31.57%	31.60%	16.62%	11.65%	6.67%	6.70%	6.72%	6.74%	
Cost of Revenue	-95,985.66	-66,792.57	-80,358.71	-85,676.02	-90,954.04	-82,651.41	-84,236.13	-89,896.75	-95,569.47	-102,454.01	
Licensed Content Amortizations	-29,356.33	-32,687.56	-39,326.68	-41,928.92	-48,918.03	-40,448.71	-41,224.25	-43,994.50	-46,961.53	-50,139.91	
Produced Content Amortizations	-14,678.17	-16,343.78	-19,663.34	-20,964.46	-19,809.02	-20,224.35	-20,612.13	-21,907.25	-23,480.76	-25,069.96	
Other Cost of Revenue	-15,951.16	-17,761.23	-21,368.68	-22,782.64	-21,526.99	-21,978.35	-22,399.75	-23,905.00	-25,517.18	-27,244.20	
Operating Expenses	-26,175.45	-29,145.73	-35,065.47	-37,385.74	-35,325.25	-36,065.92	-36,757.43	-39,227.51	-41,873.05	-44,707.04	
Selling, General & Admin	-15,644.27	-19,646.47	-23,636.83	-25,200.88	-23,816.75	-24,311.21	-24,777.34	-26,442.37	-28,225.67	-30,136.00	
Selling & Marketing	-15,247.01	-16,977.17	-20,425.38	-21,776.92	-20,576.70	-21,008.13	-21,410.93	-22,849.74	-24,390.75	-26,041.53	
General & Administrative	-2,397.26	-2,669.30	-3,211.45	-3,423.95	-3,235.24	-3,303.08	-3,366.41	-3,592.63	-3,834.92	-4,094.47	
Research & Development	-8,531.18	-9,499.26	-11,428.64	-12,184.87	-11,513.31	-11,754.71	-11,984.10	-12,785.14	-13,647.38	-14,571.05	
Core result before taxes and OCI	15,417.90	17,167.45	20,654.31	22,021.00	20,807.33	21,243.60	21,650.91	23,105.84	24,664.12	26,333.40	
Adjusted taxes	-2,312.68	-2,575.12	-3,098.15	-3,303.15	-3,121.10	-3,186.54	-3,247.64	-3,465.88	-3,699.62	-3,950.01	
Core result	13,051.21	14,592.34	17,556.16	17,717.85	17,686.23	18,057.06	18,403.27	19,639.96	20,964.50	22,383.39	

Balance Sheet

Netflix Inc (NFLX US) - BS Forecast															
In Millions of USD except Per Share	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 Est	FY 2021 Est	FY 2022 Est	FY 2023 Est	FY 2024 Est	FY 2025 Est	FY 2026 Est	FY 2027 Est	FY 2028 Est	FY 2029 Est
12 Months Ending	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	12/31/2029
Core business															
Operating Cash	135.59	176.61	233.85	315.89	403.13	498.47	694.95	879.62	1,084.66	1,210.54	1,331.49	1,416.96	1,508.28	1,605.86	1,710.18
Other current assets (Core) and Accounts Receivable	3,104.03	3,966.81	4,847.18	5,899.65	1,160.07	8,736.68	12,180.38	15,417.08	19,010.69	21,217.06	23,336.98	24,834.94	26,435.44	28,145.86	29,974.13
Accounts Payable	-253.49	-312.84	-359.56	-562.99	-674.35	-866.66	-1,208.27	-1,529.35	-1,885.82	-2,104.69	-2,314.98	-2,463.58	-2,622.35	-2,792.02	-2,973.38
Other Payables & Accruals	-140.39	-197.63	-315.09	-481.87	-652.42	-662.53	-923.68	-1,169.13	-1,441.65	-1,608.97	-1,769.73	-1,883.32	-2,004.70	-2,134.40	-2,273.05
Other ST Liabilities	-3,135.74	-4,076.18	-4,791.66	-5,442.46	-5,338.31	-9887.07	-13,505.38	-17,094.17	-21,078.71	-23,525.08	-25,875.61	-27,536.52	-29,311.13	-31,207.61	-33,234.76
Net Working Capital	-290.01	-443.23	-385.28	-271.78	-5,101.88	-1,981.11	-2,762.00	-3,495.95	-4,310.83	-4,811.14	-5,291.85	-5,630.53	-5,994.45	-6,382.30	-6,796.88
Property, Plant & Equip, Net	173.41	250.40	319.40	418.28	2,097.22	1,055.67	1,471.78	1,862.87	2,297.09	2,563.69	2,819.85	3,001.53	3,194.24	3,400.91	3,621.82
Other LT-current assets (Core)	4,417.05	7,388.68	10,545.10	15,297.56	25,041.78	23,285.50	32,463.82	41,090.46	50,668.36	56,548.89	62,199.01	66,191.47	70,457.21	75,015.92	79,888.73
Other LT Liabilities	-2,078.46	-2,955.84	-3,465.04	-3,888.26	-3,355.99	-6,730.99	-9,384.11	-11,877.76	-14,466.38	-16,346.22	-17,979.47	-19,133.54	-20,567.37	-21,684.37	-23,092.92
Core business invested capital	2,221.99	4,239.99	7,014.18	11,555.80	18,681.14	15,629.06	21,789.49	27,579.63	34,008.25	37,955.22	41,747.54	44,427.25	47,290.38	50,350.15	53,620.75
Net financial assets															
Excess cash	1,673.74	1,290.96	2,588.94	3,478.60	4,615.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ST Investments	501.39	266.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ST Lease Liabilities	0.00	0.00	0.00	0.00	-190.62										
LT Borrowings	-2,342.36	-3,335.11	-6,483.83	-10,349.06	-14,759.26										
LT Lease Liabilities	-29.00	-29.20	-15.60	-11.00	-1,422.61										
Financial Debt (Investments+Borrowings)	-1,869.98	-3,098.11	-6,499.43	-10,360.06	-16,372.49	-7,128.72	-11,861.60	-15,829.07	-19,004.40	-19,682.90	-20,683.60	-20,312.60	-19,877.54	-19,592.69	-19,257.25
Net Financial Assets	-196.24	-1,808.14	-3,910.49	-6,881.46	-11,757.19	-7,128.72	-11,861.60	-15,829.07	-19,004.40	-19,682.90	-20,683.60	-20,312.60	-19,877.54	-19,592.69	-19,257.25
Equity															
Equity	-2,223.43	-2,679.80	-3,581.96	-5,238.77	-7,582.16	-9,329.88	-11,084.40	-13,214.39	-16,808.88	-20,286.85	-23,279.75	-26,472.69	-29,922.85	-33,429.88	-37,209.51

Netflix Inc (NFLX US) - BS Extended Forecast

In Millions of USD except Per Share	FY 2030 Est	FY 2031 Est	FY 2032 Est	FY 2033 Est	FY 2034 Est	FY 2035 Est	FY 2036 Est	FY 2037 Est	FY 2038 Est	FY 2039 Est
12 Months Ending	12/31/2030	12/31/2031	12/31/2032	12/31/2033	12/31/2034	12/31/2035	12/31/2036	12/31/2037	12/31/2038	12/31/2039
Core business										
Operating Cash	2,031.58	2,262.12	2,721.57	2,901.66	2,741.73	2,799.22	2,852.89	3,044.60	3,249.93	3,469.89
Other current assets (Core) and Accounts Receivable	35,607.33	39,647.90	47,700.72	50,857.07	48,054.11	49,061.67	50,002.35	53,362.49	56,961.30	60,816.48
Accounts Payable	-3,127.08	-3,481.93	-4,189.14	-4,466.34	-4,220.18	-4,308.66	-4,391.27	-4,686.37	-5,002.42	-5,340.99
Other Payables & Accruals	-2,700.24	-3,006.65	-3,617.32	-3,856.68	-3,644.12	-3,720.53	-3,791.86	-4,046.67	-4,319.59	-4,611.94
Other ST Liabilities	-39,480.75	-43,960.86	-52,889.68	-56,389.38	-53,281.51	-54,398.67	-55,441.68	-59,167.34	-63,157.64	-67,432.18
Net Working Capital	-7,669.16	-8,539.42	-10,273.85	-10,953.67	-10,349.96	-10,566.97	-10,769.58	-11,493.29	-12,268.41	-13,098.74
Property, Plant & Equip., Net	4,302.49	4,790.72	5,763.76	6,145.14	5,806.46	5,928.20	6,041.87	6,447.88	6,882.73	7,348.56
Other non-current assets (Core)	84,018.54	93,552.60	112,553.92	120,001.59	113,387.77	115,765.18	117,984.81	125,913.33	134,405.04	143,501.66
Other LT Liabilities	-27,432.90	-30,545.87	-36,749.99	-39,181.73	-37,022.25	-37,798.50	-38,523.23	-41,111.97	-43,884.60	-46,854.74
Core business invested capital	53,218.97	59,258.03	71,293.84	76,011.33	71,822.02	73,327.91	74,733.87	79,755.95	85,134.76	90,896.73
Net financial assets										
Excess cash	0.00	0.00	0.00	3,700.14	21,457.35	33,907.49	46,663.65	56,803.37	67,789.08	79,683.17
ST Investments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ST Lease Liabilities										
LT Borrowings										
LT Lease Liabilities										
Financial Debt (Investments+Borrowings)	-9,502.07	-5,284.43	-5,119.57	3,700.14	21,457.35	33,907.49	46,663.65	56,803.37	67,789.08	79,683.17
Net financial assets	-9,502.07	-5,284.43	-5,119.57	7,400.28	42,914.70	67,814.98	93,327.31	113,606.75	135,578.16	159,366.34
Equity										
Equity	-47,097.78	-57,738.12	-70,703.39	-84,540.29	-97,842.04	-111,893.75	-126,145.18	-141,626.02	-158,332.25	-176,354.35

FEE

Netflix Inc (NFLX US) - CF Forecast

In Millions of USD except Per Share	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 Est	FY 2021 Est	FY 2022 Est	FY 2023 Est	FY 2024 Est	FY 2025 Est	FY 2026 Est	FY 2027 Est	FY 2028 Est	FY 2029 Est
12 Months Ending	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025	12/31/2026	12/31/2027	12/31/2028	12/31/2029
Core Business															
Core Operating Cash Flow															
NOPLAT	229.20	264.21	788.61	1,510.47	2,295.11	1,727.81	2,223.50	2,814.35	3,470.36	3,873.13	4,260.11	4,533.56	4,825.73	5,137.96	5,471.71
Depreciation	62.28	57.53	71.91	83.16	103.58	160.78	224.16	283.73	349.86	390.46	429.48	457.05	486.50	517.98	551.62
Operating Cash Flow	291.49	321.74	860.52	1,593.63	2,398.69	1,888.59	2,447.66	3,098.08	3,820.22	4,263.59	4,689.59	4,990.61	5,312.23	5,655.94	6,023.33
Invested Capital - Fixed Assets	4,590.46	7,639.07	10,864.50	15,715.84	27,139.00	24,341.17	33,935.60	42,953.34	52,965.46	59,112.58	65,018.86	69,192.32	73,651.45	78,416.83	83,510.55
Gross CAPEX Investments		-3,048.61	-3,225.43	-4,851.34	-11,423.16	2,797.84	-9,594.43	-9,017.74	-10,012.12	-6,147.13	-5,906.27	-4,173.46	-4,459.14	-4,765.38	-5,093.72
Net CAPEX		-3,106.14	-3,297.34	-4,934.50	-11,526.74	2,637.05	-9,818.59	-9,301.46	-10,361.98	-6,537.59	-6,335.75	-4,630.50	-4,945.64	-5,283.36	-5,645.35
Invested Capital - NWC and others	-2,368.47	-3,399.08	-3,850.32	-4,160.04	-8,457.87	-8,712.10	-12,146.11	-15,373.71	-18,957.21	-21,157.37	-23,271.32	-24,765.07	-26,361.07	-28,066.67	-29,889.80
Investment in NWC & others		-1,030.61	-451.24	-309.72	-4,297.83	-254.24	-3,434.01	-3,227.60	-3,583.50	-2,200.16	-2,113.95	-1,493.75	-1,596.00	-1,705.61	-1,823.13
Investment Cash Flow		-2,075.53	-2,846.10	-4,624.78	-7,228.91	2,891.29	-6,384.59	-6,073.87	-6,778.48	-4,337.43	-4,221.80	-3,136.75	-3,349.64	-3,577.75	-3,822.22
Free Cash Flow Core Business		-1,753.79	-1,985.58	-3,031.15	-4,830.22	4,779.88	-3,936.93	-2,975.79	-2,958.26	-73.84	467.79	1,853.85	1,962.59	2,078.19	2,201.12

Netflix Inc (NFLX US) - CF Extended Forecast

In Millions of USD except Per Share	FY 2030 Est	FY 2031 Est	FY 2032 Est	FY 2033 Est	FY 2034 Est	FY 2035 Est	FY 2036 Est	FY 2037 Est	FY 2038 Est	FY 2039 Est
12 Months Ending	12/31/2030	12/31/2031	12/31/2032	12/31/2033	12/31/2034	12/31/2035	12/31/2036	12/31/2037	12/31/2038	12/31/2039
Core Business										
Core Operating Cash Flow										
NOPLAT	13,105.21	14,592.34	17,556.16	18,717.85	17,686.23	18,057.06	18,403.27	19,639.96	20,964.50	22,383.39
Depreciation	655.29	729.65	877.85	935.94	884.35	902.90	920.21	982.05	1,048.28	1,119.22
Operating Cash Flow	13,760.51	15,321.99	18,434.01	19,653.79	18,570.58	18,959.95	19,323.48	20,622.01	22,012.78	23,502.62
Invested Capital - Fixed Assets	88,321.03	98,343.32	118,317.68	126,146.73	119,194.23	121,693.39	124,026.68	132,361.21	141,287.77	150,850.21
Gross CAPEX Investments	-4,810.48	-10,022.29	-19,974.36	-7,829.05	6,952.50	-2,499.15	-2,333.29	-8,334.53	-8,826.58	-9,562.44
Net CAPEX	-5,465.77	-10,751.94	-20,852.21	-8,764.99	6,068.14	-3,402.05	-3,253.50	-9,318.58	-9,974.84	-10,681.67
Invested Capital - NWC and others	-35,102.06	-39,085.29	-47,023.84	-50,135.40	-47,372.22	-48,365.47	-49,292.81	-52,605.26	-56,153.01	-59,953.48
Investment in NWC & others	-5,212.26	-3,983.23	-7,938.55	-3,111.56	2,763.18	-993.26	-927.34	-3,312.45	-3,547.75	-3,800.47
Investment Cash Flow	-253.51	-6,768.71	-12,913.66	-5,653.43	3,304.96	-2,408.79	-2,326.16	-6,004.13	-6,427.09	-6,881.20
Free Cash Flow Core Business	13,506.99	8,553.28	5,520.36	14,000.36	21,875.55	16,551.16	16,997.32	14,617.89	15,585.69	16,621.42

Disclosures and Disclaimers

Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

This report was prepared by André Desterro and Paola Via, Master in Finance students of Nova School of Business and Economics ("Nova SBE"), within the context of the Field Lab – Equity Research.

This report is issued and published exclusively for academic purposes, namely for academic evaluation and master graduation purposes, within the context of said Field Lab – Equity Research. It is not to be construed as an offer or a solicitation of an offer to buy or sell any security or financial instrument.

This report was supervised by a Nova SBE faculty member, acting merely in an academic capacity, who revised the valuation methodology and the financial model.

Given the exclusive academic purpose of the reports produced by Nova SBE students, it is Nova SBE understanding that Nova SBE, the author, the present report and its publishing, are excluded from the persons and activities requiring previous registration from local regulatory authorities. As such, Nova SBE, its faculty and the author of this report have not sought or obtained registration with or certification as financial analyst by any local regulator, in any jurisdiction. In Portugal, neither the author of this report nor his/her academic supervisor is registered with or qualified under COMISSÃO DO MERCADO DE VALORES MOBILIÁRIOS ("CMVM", the Portuguese Securities Market Authority) as a financial analyst. No approval for publication or distribution of this report was required and/or obtained from any local authority, given the exclusive academic nature of the report.

The additional disclaimers also apply:

USA: Pursuant to Section 202 (a) (11) of the Investment Advisers Act of 1940, neither Nova SBE nor the author of this report are to be qualified as an investment adviser and, thus, registration with the Securities and Exchange Commission ("SEC", United States of America's securities market authority) is not necessary. Neither the author nor Nova SBE receive any compensation of any kind for the preparation of the reports.

Germany: Pursuant to §34c of the WpHG (*Wertpapierhandelsgesetz*, i.e., the German Securities Trading Act), this entity is not required to register with or otherwise notify the *Bundesanstalt für Finanzdienstleistungsaufsicht* (“BaFin”, the German Federal Financial Supervisory Authority). It should be noted that Nova SBE is a fully-owned state university and there is no relation between the student’s equity reports and any fund raising programme.

UK: Pursuant to section 22 of the Financial Services and Markets Act 2000 (the “FSMA”), for an activity to be a regulated activity, it must be carried on “by way of business”. All regulated activities are subject to prior authorization by the Financial Conduct Authority (“FCA”). However, this report serves an exclusively academic purpose and, as such, was not prepared by way of business. The authors - Master’s students - are the **sole and exclusive responsible** for the information, estimates and forecasts contained herein, and for the opinions expressed, which exclusively reflect his/her own judgment at the date of the report. Nova SBE and its faculty have no single and formal position in relation to the most appropriate valuation method, estimates or projections used in the report and may not be held liable by the author’s choice of the latter.

The information contained in this report was compiled by students from public sources believed to be reliable, but Nova SBE, its faculty, or the students make no representation that it is accurate or complete, and accept no liability whatsoever for any direct or indirect loss resulting from the use of this report or of its content.

Students are free to choose the target companies of the reports. Therefore, Nova SBE may start covering and/or suspend the coverage of any listed company, at any time, without prior notice. The students or Nova SBE are not responsible for updating this report, and the opinions and recommendations expressed herein may change without further notice.

The target company or security of this report may be simultaneously covered by more than one student. Because each student is free to choose the valuation method, and make his/her own assumptions and estimates, the resulting projections, price target and recommendations may differ widely, even when referring to the same security. Moreover, changing market conditions and/or changing subjective opinions may lead to significantly different valuation results. Other students’ opinions, estimates and recommendations, as well as the advisor and other faculty members’ opinions may be inconsistent with the views expressed in this report. Any recipient of this report should understand that statements regarding future prospects and performance are, by nature, subjective, and may be fallible.

This report does not necessarily mention and/or analyze all possible risks arising from the investment in the target company and/or security, namely the possible exchange rate risk resulting from the security being denominated in a currency either than the investor’s currency, among many other risks.

The purpose of publishing this report is merely academic and it is not intended for distribution among private investors. The information and opinions expressed in this report are not intended to be available to any person other than Portuguese natural or legal persons or persons domiciled in Portugal. While preparing this report, students did not have in consideration the specific investment objectives, financial situation or

particular needs of any specific person. Investors should seek financial advice regarding the appropriateness of investing in any security, namely in the security covered by this report.

The authors hereby certifies that the views expressed in this report accurately reflect his/her personal opinion about the target company and its securities. He/ She has not received or been promised any direct or indirect compensation for expressing the opinions or recommendation included in this report.

The content of each report has been shown or made public to restricted parties prior to its publication in Nova SBE's website or in Bloomberg Professional, for academic purposes such as its distribution among faculty members for students' academic evaluation.

Nova SBE is a state-owned university, mainly financed by state subsidies, students tuition fees and companies, through donations, or indirectly by hiring educational programs, among other possibilities. Thus, Nova SBE may have received compensation from the target company during the last 12 months, related to its fundraising programs, or indirectly through the sale of educational, consulting or research services. Nevertheless, no compensation eventually received by Nova SBE is in any way related to or dependent on the opinions expressed in this report. The Nova School of Business and Economics does not deal for or otherwise offer any investment or intermediation services to market counterparties, private or intermediate customers.

This report may not be reproduced, distributed or published, in whole or in part, without the explicit previous consent of its author, unless when used by Nova SBE for academic purposes only. At any time, Nova SBE may decide to suspend this report reproduction or distribution without further notice. Neither this document nor any copy of it may be taken, transmitted or distributed, directly or indirectly, in any country either than Portugal or to any resident outside this country. The dissemination of this document other than in Portugal or to Portuguese citizens is therefore prohibited and unlawful.